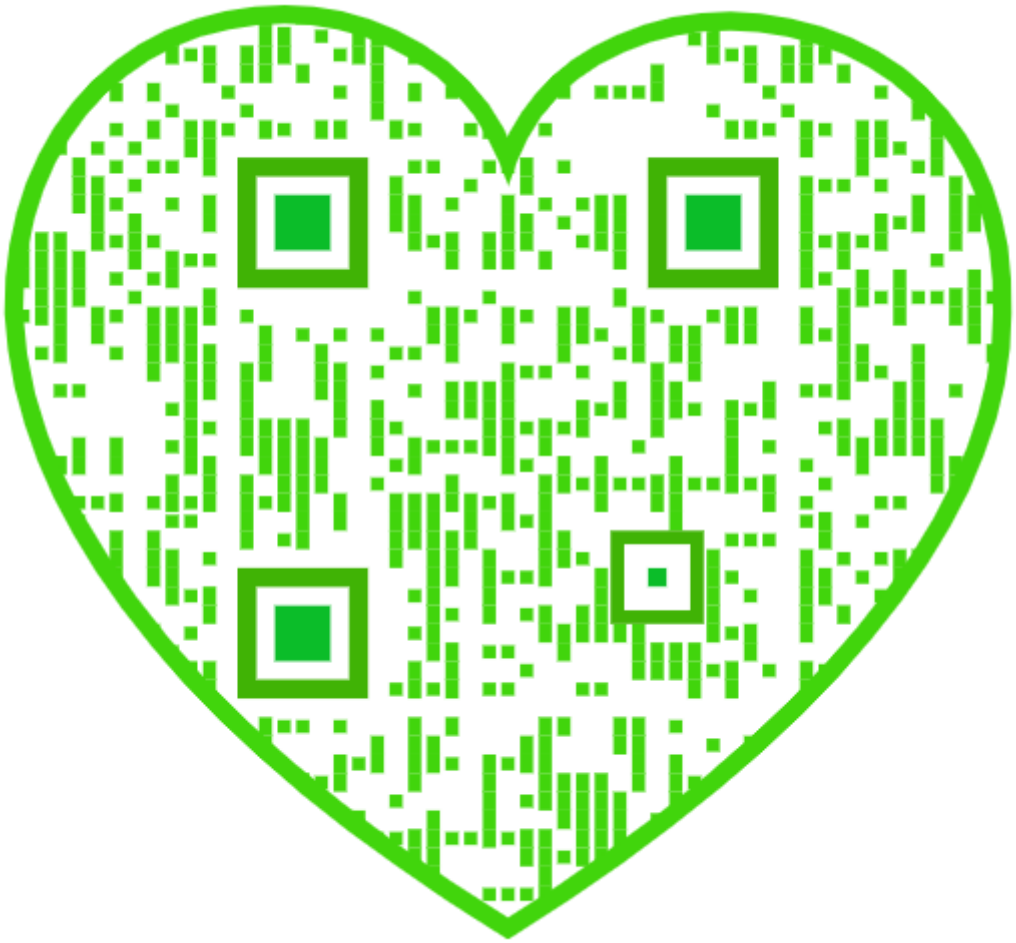
ANOTHER HARDY GARDEN BOOK

HELENA RUTHERFURD ELY



ANOTHER HARDY GARDEN BOOK

The MC Co

THE POOL.

ANOTHER HARDY GARDEN BOOK

BY

HELENA RUTHERFURD ELY

Author of "A Woman's Hardy Garden," etc.

WITH ILLUSTRATIONS MADE FROM PHOTOGRAPHS TAKEN IN THE AUTHOR'S GARDEN BY PROFESSOR CHARLES F. CHANDLER

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Dedication

TO

ALFRED ELY

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INTRODUCTION

A corner for afternoon tea

CHAPTER I

INTRODUCTION

THE aesthetic side of Nature has always appealed most strongly to woman. The shadows on the mountain side, the deep green coolness of the forest, the mighty trees and tropical-like foliage of the thickets, the murmur of the splashing brook, the golden lights in its still brown pools, and the clear blue lake, all fill her mind with dreams; troubles and cares flee away, and she is transported to the world of imagination.

Man, alas! looks upon the brook with its quiet pools as a sure place for trout. In the forest he hopes to meet a deer, perhaps a moose, possibly, if he be very brave, a bear. For him the thicket is but a covert for quail, pheasant, or partridge, and the

blue lake a likely place for fish, or the wild duck. The primeval love of the chase survives as a passion in his heart. Chained perhaps to city and office and free for only a few weeks in the year, he plans all the long months to get away for these weeks into the wild, and to kill something, not only for the savage joy of killing, but that he may eat. Eating! how much of the tragedy and pleasure and anxiety of life surround the word! Tragedy for the unfortunates whose light is extinguished for lack of food, and of whose pangs those who only know enough of hunger to call it good appetite, can have no conception; and pleasure to the agreeable people who meet around a dainty, well-served table to share a well-cooked meal! Best of all, perhaps, the dinner or luncheon tête-à-tête, or with a party of congenial spirits whose talk can be the spice of life. With breakfast, luncheon and dinner coming as regularly as night follows day, how rarely do we think

of the anxiety and the labor that have gone to their production.

The world is inhabited by bread winners toiling for a home and for food. It may be that the home is but a hovel and the food only the portion necessary to sustain life. Or the "home" may be town and country house, with villa by the sea and mountain camp. Yet the toiler is back of it all, working with head or with hands; and with all, the object is still the same, with a difference only in degree.

Idlers in the market place are comparatively few and are but ciphers in the world. The man whose fortune is inherited, who accepts his wealth as a trust, and feels that his money and his position bring obligation, to whose generosity and continued care we owe hospitals, trade schools, universities and other institutions, has really less freedom from care and less time absolutely his own than the craftsmen and laborers, whose daily toil alone provides their daily needs.

Was there ever a man whose life has been told in prose or song, whose days, for a time at least, were so gentle an idyl as those of Elijah by the brook Cherith, when, worn with the stress of life and with journeying to and fro in the earth, he came to dwell in the shade by a murmuring brook and was fed by the birds? With no care and no anxiety, he had time to rest and to commune with Nature. And when the water of the brook ran low and quietude began to pall and the ravens' diet grew tiresome, he was sent to the house of a widow, probably young, for her son whom he was able to restore to her from death was a child, and certainly comely. For are not all widows comely, and do not all men and most women admit, that for charm and magnetism and knowledge of the ways of mankind, other women compared to a widow are as "moonlight unto sunlight, and as water unto wine"? Moreover, Elijah's widow had a taste for culinary matters, for her

Borders filled with perennials and annuals
June twenty-fifth

cakes were light and good and she had many ways of making them.

Is there not a saying about the way to a man's heart? But are not many women often indifferent to what they eat? The table must be orderly and attractive and the cooking good, but for them food is rather a necessity only. Were it not for other members of the family many women would, I imagine, be quite content to live on simple things, milk and cream, fruit and nuts, with possibly some of those wonderful breakfast foods whose merits for health and eternal vigor are recounted in the advertising pages of every magazine and newspaper and stare at one from bill-boards, in trolley car and station.

Most men who care for gardening devote themselves rather to the utilitarian side of the craft. They are deeply interested and generally successful in producing the finest vegetables and fruits, while flowers come as a secondary consideration. May this not be

due to an inherited trait of ancient date? Primitive man, having been obliged for centuries to provide the food for himself and those dependent upon him through the chase and the tillage of the soil, it may be that his descendants of to-day in moments of leisure still turn instinctively to Mother Earth for delicacies for their tables, and leave to women the aesthetic part of gardening.

A woman's heart in gardening is with her flowers and shrubs, and the raising of vegetables is often a propitiatory offering to the other members of the family, who might otherwise accuse her of too much attention to the merely ornamental and beautiful. But if she care at all for growing things, she will naturally do what she can to make the vegetable garden successful; she will see that as many varieties as possible are grown, and that if possible her table is supplied, throughout the season, with fruits and vegetables from her own

garden. She will even compete with her neighbors for the first peas or corn. Who does not know the mortifying question, "Have you had peas from your garden yet?" The condition of mine when others have announced that "they had them last week" has often induced in me the secret thought that their "peas" must have been only "pods."

In taking women through my flower gardens I have never heard one ask about the vegetable garden, but I do not remember a single instance of showing the flowers to a man who failed to inquire with a strong note of interest about the vegetable garden.

Aside from the pleasure of raising your own vegetables, and their superiority in freshness and delicacy, it is certainly an economy, and if the work be done regularly the garden is easily kept in order.

All well-ordered houses are run systematically, certain work being done on certain days. The garden must be attended to

with the same system. Every part of the work should have its special time and be carefully laid out. The men in a large garden thus know what is to be done each day; and if but one man be kept he will easily accomplish more with better results than if the work be done in his own puttering way. If the same routine be followed in a little garden cared for by the members of a family, each bed or border weeded on a particular day, vines and plants tied up, grass cut, edges trimmed with shears, and all the other necessary things done regularly, then the garden will be always in order, and weeds will have no chance to become rampant.

The impetus that gardening has lately received in this country has resulted in the greatest improvement in towns and villages. But what makes more for general and most-to-be desired improvement and beauty is not the half dozen fine places in a town, but the many streets lined with pretty unpre-

Vase of Penstemon Alba
July fourth

tentious houses, each with neat lawn and flower borders, a few shrubs, two or three good trees, and having in the rear a small vegetable garden, all cared for by the owner, with perhaps a man for a day now and then.

If the vegetable garden be gone over carefully once a week, every weed taken out by the roots, and the earth well stirred and loosened with the hoe or cultivator, the vegetables will thrive and the place always look neat. If the garden be good-sized, a cultivator, with its array of tools, will be found a great saving of labor; but if small, a rake, spade, hoe and trowel will answer every purpose.

Where the place is too small for a complete vegetable garden, a plot of ground twenty feet by thirty, if well fertilized and well cared for, will yield enough tomatoes, cauliflower, egg-plants, peppers, lettuce and parsley for a family of eight persons. On this plot there is room for four dozen cauli-

flowers, four dozen egg-plants, two dozen pepper plants, three dozen tomato plants, three crops of lettuce, and sufficient parsley.

But little time is required for the care of so small a plot if it be regularly attended to. The plants can be raised from seed sown the first of March in boxes in sunny windows, or in a small hot-bed, or they may be bought about the 18th or 20th of May, which is the time to set them out. Two of the seedsman's packets of each variety of seed, costing but five cents each (except the Cauliflower, which is ten cents), will raise more than sufficient plants.

I should like to see every little house with even a bit of ground about it, beautified with vines and shrubs and ferns planted closely about the foundations of the house, with flower borders along the fences and dividing lines, and with a little patch of vegetables in the rear.

A home is always more a home when the outside is cultivated and made beautiful.

Go out into the country, oh ye flat dwellers of the city, and make a home; have a few rods, if no more, of your own ground about you and till it, and tend it; the flowers you raise will be sweeter and more beautiful to you than any displayed in florists' windows, and no vegetables that can be bought will compare in flavor with those you will raise yourself. If every woman blessed with a place of her own would do what she could to interest her humbler neighbors, giving them seeds, plants and shrubs from her own garden, telling how they should be planted and cared for, and interesting the children in raising flowers and vegetables, the result would be not only a beautified community, but a bond of sympathy between people in all walks of life, with a softening and refinement of character that comes from the spread of the love of Nature.

Stalks of Hyacinthus Candicans
August twenty-first

THE VEGETABLE GARDEN

CHAPTER II

THE VEGETABLE GARDEN

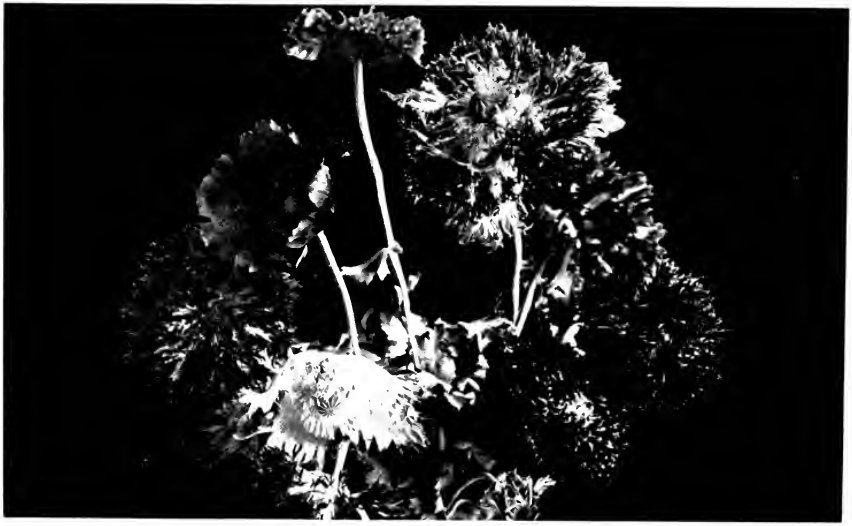
THE size of the vegetable garden will naturally depend upon the space at your disposal. Let everyone with even a little ground give a certain portion, no matter how small, to the growing of vegetables, and if possible, raise enough of these good things to supply the home table and occasionally to spare a choice basketful to a less fortunate friend.

The vegetable garden, if a large one, should always be laid out so that access can be readily had to all parts of it, either by horse and cart or with a wheelbarrow.

I have a lasting monument to my own short-sightedness in a garden laid out in Box-edged plots. There is ample room for a horse and cart to pass between the plots,

but no place to turn, so the cart must be backed out the way it came in; and of course, neither cart nor wheel-barrow can fly over Box-edges, so the cart must be unloaded into the wheel-barrow and a bridge of boards made over the Box-edging, in the Spring to bring fertilizer and in Autumn to carry away rubbish. There is no way of remedying this serious fault but by rearranging the entire garden, and the trees and plants have now acquired such a fine growth that I am unwilling to take this radical course, so the work must be done under the consequent disadvantage and loss of time.

An ideal vegetable garden is surrounded by a hedge of Siberian Arbor Vitae, or Hemlock Spruce; both are beautiful to look at, either through the Winter months when anything green is so restful to the eye wearying for verdure, or in Summer when the feathery shoots of light green are things of beauty. An evergreen hedge is also valuable both as a wind break or protection in



Large fringed Poppies

Spring and Fall, and as a screen during the Winter, when, in the absence of snow, bare earth only is visible and the vegetable garden is unattractive.

Running around the garden, inside the hedge, there may be first a border six feet wide, where herbs and various perennial flowers for picking can be grown. At one end, with the right exposure, and the hedge at the back, an excellent place can be found for cold-frames and hot-beds. Inside this border, unless your space be limited, there should be a broad path, certainly eight feet wide, for a horse and cart to pass around the garden, which should be intersected at right angles by wide paths crossing the garden in each direction through the center, leaving four plots of equal size, one of which should be devoted to small fruits, unless there is space for them elsewhere. This is a most practical plan for a large garden which can be both a flower and vegetable garden by making additional borders from

four to six feet wide for flowers along the four front sides of each plot, leaving the middle of each plot for the vegetables.

If your ground be so limited that provision can be made only for vegetables, the same general plan may be followed, omitting the borders for flowers and narrowing the paths in proportion. These, however, should not be less than three or four feet wide, that a wheel-barrow may pass comfortably in all directions.

The vegetable garden should be on well-drained land made as nearly level as possible. Where the ground slopes, fertilizer and top soil will be washed by heavy rains to the foot of the slope, and in dry weather the earth is more likely to become hard and caked. Fine seeds, too, when sown on an incline, may be washed away if heavy rains come before they germinate. Ground not naturally level can be terraced.

Light rich loam, which is the ideal garden soil, is not possessed by all, so the next best

thing is to help the natural soil by giving it the lacking constituents. Plenty of well-rotted stable manure, muck from low lands if it can be had, wood ashes, bone meal, a sprinkling of air slaked lime, and, if the soil be stiff or clayey, some sand may be added.

If the vegetable garden is large, the parts where corn, beets, and beans are to be planted can be broken up first with a plow and thoroughly harrowed before raking, otherwise let the ground be well spaded and the earth thoroughly pulverized, then smoothed down with a rake. Proper preparation of the soil is the first essential for the production of good crops; then if the ground be frequently stirred and kept free from weeds, you cannot fail of success.

Having arranged and prepared your ground, then comes the planting.

Vegetables should always, if the space permits, be planted in rows, as this facilitates cultivation and lightens the labor.

All the space at your disposal should be constantly utilized and the moment one crop has finished bearing, it should be pulled up, some more fertilizer spread, the ground again spaded and raked, and another crop sown. For instance, a second crop of beans can follow the spring spinach, and the third crop of peas may be grown where the first beans ripened. Carrots can follow the first crop of peas; celery the second crop, and so on. Beans, peas, etc., can follow each other on the same soil if it be well enriched and again prepared before each planting, but it is preferable to follow one crop by another of a different variety.

Asparagus, rhubarb, and currants, which no garden, unless very small, should be without, are long-lived and hardy, and if planted carefully in the first instance, will keep in fine condition and bear for many years, with the simplest care.

The following vegetables are grown in

A single blosson of Anemone Japonica Whirlwind
September seventeenth

most gardens of any size, require no special skill, are easily raised, are, most of them, in their season, on the menu of every good housekeeper when she can procure them, and give a sufficient variety for any ordinary household:

Artichokes;—The French Globe is the best variety. Seed may be sown in boxes in the house, or in the hot-bed about March 1st and the plants set out in the open ground the end of May in rows two feet apart each way. The soil should be a rich deep sandy loam with plenty of well-rotted manure. If sown very early and the season is favorable, artichokes will begin to appear in September. But as a rule they do not yield until the following season. Being perennials, they will bear any number of years. North of Washington the plants should be tied to stakes in November and the spaces between the rows and also between the plants filled in well over the tops of the plants with earth, and a good coating of stable

litter placed over all; or they may be lifted and kept over the Winter in a pit or cold frame. Not very much grown in this country, they are certainly worth the trouble, as no vegetable is more delicious.

The edible part is the flower head, which must be cut before the flower expands. Artichokes for eating are boiled and well drained, and served with a Hollandaise sauce, or placed on ice after boiling until they are cold and eaten as salad with French dressing. Or again, after cooking, the heart, or "fond," as the French call it, is removed from the leaves and served in various ways.

One ounce of seed will raise a sufficient number of plants.

Asparagus. When there is space there should always be an asparagus bed. There is trouble in making it, but once done it is there for years to come. For a family of eight, four rows twenty-five feet long and three feet apart will give an ample supply. But double the space can well be given

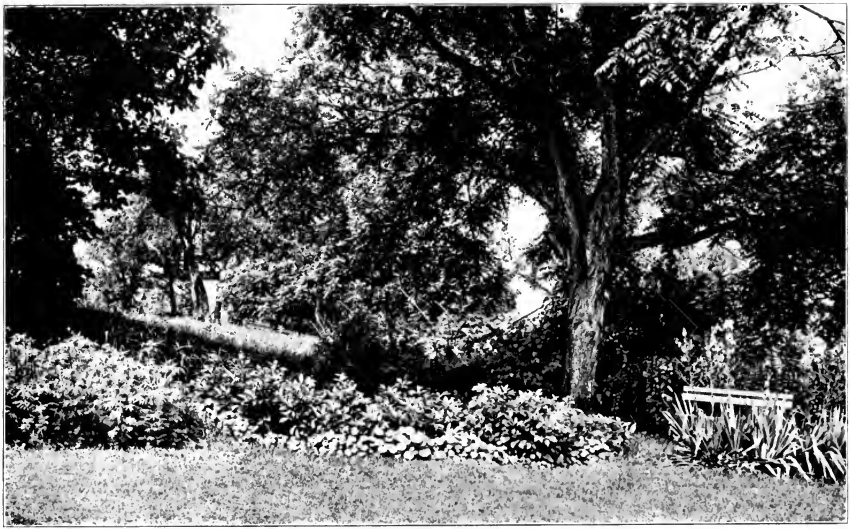
to the asparagus bed. Make four trenches, each sixteen inches deep, three feet apart and twenty-five feet long; put six inches of well-rotted manure in the bottom and cover this with four inches of rich garden soil; then set the plants eighteen inches apart, spreading out the roots carefully, and fill up the trenches with good earth. It is a saving of time to buy the plants, and if two years old, they may bear the year after they are set. If one-year-old plants are used, the bed should not be cut for two years.

Asparagus should be set out in the Spring. Care must be taken to have the manure well packed down and the plants firmly set in the earth. In the very early Spring, the third week of March if not before, the Asparagus bed should receive a thick coating of stable manure, which must be well forked into the ground at once. In early Summer, as soon as the bed has ceased bearing, sow over the surface of the bed two bags each

of bone meal and nitrate of soda which have been well mixed.

The crowns of the plant and the buds which form the stalks for the following year, make their growth during the Summer, which is, therefore, the time to feed them. The old practice of covering the bed with manure in November and forking it into the ground in Spring has been done away with, and instead the plants are stimulated at the time of growth. From time to time before sowing the nitrate of soda and bone meal, some of the earth should be removed from over the plants so that the tops of the crowns are not more than three inches below the surface. Formerly everyone sowed salt on the asparagus bed, but I have not found that it serves as a fertilizer, but rather to kill the weeds, which grow rapidly in the rich soil.

Because of its rich earth there is no better place than between the rows of the asparagus for cauliflower and egg-plants,



At the end of a lawn
August tenth

and their cultivation will keep the bed free from weeds after it has ceased to bear.

An asparagus bed should never be cut too closely. Leave three or four stalks on each plant to mature, so that the roots may be better nourished.

Beans are easily injured by frost, so that it is not safe to sow the first crop before the 10th of May unless the season is very early. Make the drills two inches deep and eighteen inches apart, drop in the beans every three inches and cover them with about two inches of earth. Four crops can well be planted, and the rule in our garden is to plant the second crop when the first is about four inches high, and the third when the second planting has reached the same height. The last crop can be planted the first week in August.

Two quarts of seed will be sufficient for all the plantings for a family of eight. There are many varieties; each seedsman has some specialty, and the same variety often

appears under different names, but the small, crisp, green-podded ones are infinitely the best.

Beans are so easy to produce, that gardeners are apt to raise a larger quantity of them than of any other vegetable. A friend who has a large garden and employs several men, told me recently a story of his experience last year with beans and gardeners. He had asked his head gardener in the spring about mid-April if he had begun the vegetable garden, and the man replied, "Not yet, it is too cold and wet." To a similar enquiry in mid-May the reply was, "It is too warm and dry." As a result, little else but the prolific bean was raised in that garden during the Summer, all the other vegetables being sent out from town; but beans large and beans small, in great quantities, were brought in daily by the gardener until finally not a member of the household would partake of them longer.

Lima Beans are among the most tender

of the vegetables and must not be exposed to any frost; therefore in the locality of Central and Southern New York the last week in May is early enough to plant them. Make hills two feet apart in rows two and a half to three feet apart. Set poles eight feet or more in height firmly in the center of each hill and then plant the beans about five to a hill. As the plants grow they must be wound about the poles.

A quart of Lima beans will be enough for one family.

Beets. The small dark red round Beets are the best. The first crop can be sown in the Spring as soon as the frost is well out of the ground, and afterwards every three weeks until the 1st of July, when the last crop should be put in. Sow the seed in drills a foot apart, covering with about two inches of earth; when three inches high thin out the plants to three or four inches apart. Beets are only fit to eat when they are young, sweet and juicy, so do not sow

too many at one time. Two ounces of seed will be sufficient.

Brussels Sprouts. Most books on vegetables tell one to sow the seed in hot-beds or cold-frames, but I have always had the seed sown thinly in drills in the open ground about the middle of May. When well up the plants are thinned out so that they stand about a foot apart, in rows eighteen inches apart. They require no particular culture beyond being well hoed once a week.

When the sprouts begin to form, the leaves should be stripped from the stalk, leaving only three or four at the top; the sprouts are ready to be eaten in October. A touch of frost much improves them, and by the end of October the crop can be gathered and stored in baskets in a cool, dry cellar, where they will keep well. I think they are horrid things myself, and grow them only as a concession to a certain member of the family who adores them and

A small shrubbery four years after planting
September nineteenth

whom I endeavor in sundry ways to placate. After stripping off the outer leaves and washing them carefully, place enough for eight persons in a double boiler with two tablespoonfuls of butter, a little salt and a dash of pepper. The water in the under boiler must be kept madly boiling for three hours. Thus steamed, not boiled in the usual way, they will be found really delicate.

One ounce of seed will raise a goodly quantity of plants.

Carrots. Two crops of carrots are generally sufficient; these can be sowed about the 15th of May and again the 1st of July. Sow in drills a foot apart and when the carrots are well up thin them out to three inches apart. Carrots are delicious if gathered when about the size of your little finger and steamed in butter until tender.

One ounce of seed is quite enough.

Cauliflower. There is certainly great satisfaction to the garden lover in seeing the

beautiful solid white cauliflower heads of her own raising, surrounded with their blue-green leaves. The soil must be rich and the plants should be set out about May 20th, although for an early crop they might be set out the last of April. If the weather comes off dry the cauliflowers will suffer, as they require water. A good mulch will help them by keeping the soil moist. When the heads begin to form draw the leaves together and tie them near the top over the cauliflower. This forms a protection from the sun and keeps the cauliflower white.

Two packets of seed should raise a sufficient number of plants. The seed for an early crop should be sowed in March in boxes in the house or in hot-beds. Seed for a late crop to be set out the end of July may be sowed early in May in a small bed in the garden. The seedlings must be watered carefully and not allowed to suffer from drought.

Celery. Seed for celery can be sown in

the open ground in mid-April in a small bed where the soil has been finely pulverized and made rich; they should only be covered with a quarter of an inch of earth, which must be well pressed down; the bed must then be watered daily if there is no rain.

When the little plants are well up, thin them out to about three inches apart and keep them free from weeds. About the 15th of July they will be in condition to set out. Make a shallow trench six inches deep and spade some old manure into the earth in the bottom of the trench, cover this with a layer of garden soil and then set the little celery plants about eight inches apart, being careful to set them firmly. They should be transplanted about sunset and well watered; they will do better if partially shaded from the sun for a few days by boards or branches laid over the trenches. The trenches should be three feet apart for the dwarf and medium varieties and four to five feet if the large varieties are used.

As the plants grow the earth on either side of them should be carefully hoed against the plants, and packed around them with the hand. Care must be taken not to break the stalks and not to let the earth get into the center of the celery.

If it is desirable to save celery for Winter use, this can be done in two ways. Early in November dig a trench in the garden somewhat deeper than the height of the plants. In this, place the celery close together; then fill the trench, packing the earth closely, letting the sides of the banked-up celery slope away from the plants so that water will be carried off. Cover the top with a thick layer of litter, straw or leaves, laying boards over all. In this way the celery will blanch and keep perfectly. The other method of storing is to pack the celery in dry earth in barrels or boxes, which should be kept in a cool cellar that does not freeze.

One ounce of seed should raise at least two thousand plants.

Chicory makes so delicious a salad that it is well worth growing. Sow the seed the last of May in drills about eighteen inches apart. Thin out the plants to six inches and the first week in August draw up the leaves and bank up the plants in the same manner as the celery. In this way they will blanch and become crisp and tender. The Witloof is the best variety and one packet of seed will be enough.

Corn Salad is one of the earliest vegetables to mature in the Spring. Sow the seed the last of September, and the middle of November cover with straw or leaves; uncover very early in the Spring and by the middle of April the tender leaves can be gathered for salad. Two packets of seed will be sufficient.

Sweet Corn, when really sweet and tender, is one of the most delicious of the many vegetables that Americans are blessed with.

Who, on returning in early Autumn from a Summer abroad, does not welcome it upon the daily menu with delight!

I remember, when spending a Winter in Berlin, a very grand luncheon where canned corn, an excellent variety, was served as an entree, and how nice it was! The hostess had been in America the year before and learned to know our corn, and had brought over a case of it. It was really funny to see how the high born dames enjoyed it and to hear them exclaim *"ausgezeichnet!"*

The ground for corn should be rich and cultivated deeply. Hills can be made in rows three feet apart each way. Plant four or five kernels in each hill and hoe the earth against the growing plants once every week until they are well grown. It is best to have three plantings: the first about May 10th, the second the first week in June, and the last about the third week in June. White Cory for the first crop, Crosby for the second, and Evergreen for the third,

Borders and vine covered pergola
July fifteenth

are as satisfactory as any of the varieties.

One pint of seed for each planting will raise enough corn to supply a good sized family.

Cucumbers are tender plants which should not be sown in the open ground until May 20th; a second crop can be sown early in July. Make hills three to four feet apart each way and dig some old manure and a little wood ashes into the earth in the middle of each hill and plant four seeds in each.

One-half ounce of seed will plant twenty-five hills. Cucumber vines are apt to be infested with beetles, for which Bordeaux Mixture is the best antidote. In small gardens the easiest way to get rid of the creatures is by hand picking.

Egg Plants are very tender and the young plants must be started in the house or in hot-beds and should not be set out in the garden before the third week in May. They require a rich soil and will yield better if a small trowelful of nitrate of soda

with a little bone meal added to it be dug about the plants toward the end of June.

Two packets of seeds should raise enough plants. Egg Plants are somewhat difficult to raise from seed and the beginner might better buy them.

Lettuce for very early crops can be started in the hot-bed or in boxes in sunny windows of the tool-house, and sown in the garden about the middle of April. Or it can be sowed in the open ground as soon as it is in condition to work. Sow the seed very sparsely and when well up thin out the plants to from six to eight inches apart.

Lettuce requires a rich and finely pulverized soil. Sowings can be made every two or three weeks until the middle of June, but if the Summer proves hot and dry it is well to intermit the sowings until August, when the last crop can be put in. Of the many varieties there are none better than Boston Market and Tennis Ball.

One-half ounce of seed will raise more

than enough lettuce for a medium sized family.

Mushrooms. Any one can raise mushrooms who has a cellar under an out-building. For obvious reasons it would not be agreeable to raise them under a house. We have raised them successfully; a bed about six feet by twelve feet giving us from the first crop, from a pound to three pounds daily for nearly six weeks. The bed was then watered, a little fresh earth spread over it and well firmed down, and in three weeks a second crop appeared.

There are no better directions for making a mushroom bed than those given by Henderson and by Thorburn, and I have found their spawn excellent. One of the most important things is the condition of the manure. But if you want to have success, it is absolutely essential to follow the directions accurately. Few people are patient enough to do this, but will insist on making mushroom beds with various modifications of their own,

and, in consequence, raise no mushrooms. They even say, "It is all a matter of luck," or "Raising mushrooms is very difficult," although it is simply a matter of absolutely following the rules which experience has proved to be essential.

Okra. When all danger from frost is over, the okra can be sown, and if the Summer is warm there will generally be a fine crop. If the Summer is cold, okra frequently does not bear in the North. It should be gathered about a week after flowering. Be sure that the pods are crisp and snap easily, as when large they become woody and uneatable. When more okra ripens than can be readily used, it may be cut in thin slices and dried for Winter use.

A friend once sent me from Charleston a great basket of okra, so fresh that it seemed impossible for it to have been two days en route. With it she sent a receipt for gumbo soup that her colored cook had given her. I give the receipt and am sure

that once tried it will become a favorite dish. It will readily be seen that gumbo soup so prepared is almost a meal in itself.

The soup takes four hours to make. Put into a kettle two pounds of lean soup beef, one-half a chicken which has been jointed, a small ham bone, or a good sized slice of lean bacon, a slice of green pepper, and a square inch of onion. Add three quarts of water and boil or simmer gently, skimming often for two hours. At the end of this time add a quart and a half of okra which has first been cut in slices and fried lightly in the smallest quantity of butter possible, and add also a large potato cut in pieces, which gradually breaks and thickens the soup. An hour later, after frequent skimming, add a full quart of tomatoes and the corn cut from two large ears, and also the cobs, and continue to boil gently for yet another hour. Then remove the piece of beef, or whatever is left of it, and also the corn cobs, cut the meat from the chicken

bones, returning the chicken to the soup, add a teaspoonful of sugar, a teaspoonful of Worcestershire sauce, salt and cayenne pepper to flavor, and the soup is ready. Some rice boiled very dry should be served at the same time, that those who wish may add a spoonful of it to their soup. I have been told that the Creoles generally take the gumbo at the midday déjeuner, having first some fruit, then the soup, afterwards a salad, followed by cheese and coffee, which is certainly an ideal meal for a Summer's day.

Sow okra seed thinly in rows eighteen inches apart and two inches deep and thin the plants out to eight inches apart. I use the White Velvet variety and find that a quarter of a pound of seed gives an ample number of plants.

Onions. No garden should be without onions. Two ounces and a half of seed will raise quite enough; sow them in drills a foot apart about the middle of April;

cover the seed lightly but firmly with soil. The young plants should be thinned out to three inches apart. As they grow the onions will appear above ground, but do not cover them, as this is their habit of growth.

Onions require a rich, heavy soil; indeed, the large crops of them for market are raised on low meadows where the soil is black mŭck. In the garden, of course, you can only give the ground plenty of fertilizer and abundant cultivation, and the result is generally all the onions you wish to use. The success of the onion crop depends upon its being kept free from weeds. When ripe pull them up and let them dry in the sun for a couple of days, then store away in boxes in the cellar. White onions of medium size are the most desirable.

Onions may also be grown from small bulbs called sets. These should be planted about three inches apart and a couple of inches deep, in rows a foot apart. If planted as soon as the ground can be worked in the

Spring they will be ready for the table in about four weeks, but it is advisable to raise only the early crop from sets and the main crop from seeds.

Parsley should be sown in drills very early in the Spring, and will be large enough to use in six weeks from the time of sowing in the open ground. It is well to soak the seeds over night before sowing, as they are slow to germinate. Thin out the young plants to three inches apart. Parsley is a perennial and if covered in late November with some litter will generally survive the Winter. One ounce of seed is quite enough.

Parsnips. Sow parsnip seed also very early in the Spring in rows eighteen inches apart and thin out the plants to six inches apart. Late in the Fall the parsnips can be packed in dry earth in barrels or boxes and stored for Winter use. Or they can be buried deeply in the garden and dug up as wanted.

Peas. Every one likes peas and every

A bed of Anemone Japonica Whirlwind
September nineteenth

one wants their season extended as late as possible. My orders to the gardener are to plant a new crop as soon as the first is two inches above the ground and to continue doing this until the middle of June. The first two and the last crops are always the largest planted; and, as the late ones art apt to suffer from dry weather, a last crop can be planted about August 1st. If the weather at this time is dry it will be well to soak the seeds for twenty-four hours before sowing and when they are up, to mulch them two or three inches. The first crop should be planted as early in the Spring as the ground can be worked.

For years I grew only the tall varieties, but they required so much labor and occupied so much room that in recent years we have grown only the dwarf peas. Old-fashioned gardeners and men who have been trained under them will still pin their faith to the tall-growing peas, and I know some people who think that the Champion of

England is the only kind to raise. However, the Little Gem and American Wonder, both dwarf, are sweet and juicy and produce large crops, so I plant them every year with most satisfactory results.

Four quarts of pea seed will raise an ample quantity for a medium sized family.

There is such a difference between the French and American ways of cooking peas that if they have been once eaten as the French cook them, the American boiled peas will never again be seen on the table.

One Summer we spent several weeks at a delightful inn on the Normandy coast, kept by the nicest Frenchman and his wife, who could not do enough to please us. When they noticed that I did not care for "haricot vert" (and who ever returns from a Summer on the Continent without registering a vow never to look another string bean in the face?) there were generally some peas prepared for me; upon request the Frenchman told me how to cook them, and

I give the receipt, as it does not seem to be generally known.

Place enough peas for eight persons in a double boiler, add two tablespoonfuls of butter, six leaves of lettuce, and three tiny onions as big as the top of one's finger. Keep the water boiling under them for three hours, when they are ready to serve. The butter and lettuce add to the juice, and the baby onion gives such a soupçon of flavor that one scarcely knows it to be onion.

Peppers. The seed for peppers may be sown in the hot-bed, but I have it sown directly in the garden about May 10th; two packets of seed will raise quite enough plants. The soil should be rich and finely pulverized. Sow the seeds thinly and when the young plants are well up thin them out to eighteen inches apart. Peppers are apt to be killed by the first frost, so it is well when frost is expected to have all that remain on the plants gathered at once. If

stored in a cool, dark place, they will keep a long time.

Radishes are most acceptable in early Spring, and if they are to be raised in the garden, should be sown as soon as the frost leaves the ground; the rows should be about a foot apart and the plants about two inches apart in the rows. The small dark red variety is the best. One ounce of seed is sufficient, and sowings can follow each other about every three weeks.

Rhubarb. Every garden should have at least a few plants of rhubarb. A dozen roots can be bought for about a dollar and a half, and will last a lifetime. They should be planted in a corner where they will be undisturbed, and require little or no culture beyond keeping them free from weeds. Cut off the leaves in late Autumn and throw some litter over the plants, and fork some manure into the ground in early Spring.

When the rhubarb starts in the Spring, if barrels without heads are placed over the

plants to exclude the light, they will grow up tall and white and be crisp and tender, quite another thing from the stalks of the uncovered plant. It is generally enough to cover four plants to begin with, and then as soon as one plant has been cut, to move the barrel to another plant, and so on.

Salsify. Sow salsify or vegetable oyster as early as the ground can be worked and treat it in every way like the parsnip.

Spinach. Seed for early Spring spinach should be sowed in October, well covered with leaves or coarse litter at the end of November and uncovered at the end of March. By the 20th of April it should be ready to gather. Spinach treated in this manner has always survived the Winter, except the last terrible one. If it is not thought desirable to run the risk of Autumn sowing, then sow the seed the moment the frost is out of the ground in the Spring, and the crop will be ready by the middle of May. Spinach for a Fall crop should

be sown about August 10th. Sow two ounces of seed in drills a foot apart.

Squash is a tender plant and the seeds should be planted at the same time and in the same manner as cucumbers; one ounce of seed will be enough for about twenty hills, which is ample for a medium sized family. Keep a sharp lookout for beetles; a few minutes hand picking in the morning will keep the vines of squash, cucumbers, and melons free from these creatures. The vines may also be sprayed with Bordeaux mixture or with Paris green. Mix enough water with one-fourth pound of Paris green to make a paste; add thirty-seven quarts of water, and use this as a spray.

An important thing to remember is the fact, that the busy bees will mix the pollen of cucumber, squash, and melon, therefore plant them as widely separated as possible. Canteloupes that taste of squash or cucumber have generally been impregnated with the pollen of these plants.

Tomato plants must be raised in a hot-bed or in shallow boxes in the house, and should not be put out until the end of May. Set the plants in rows three feet apart each way. There are many ways of training tomatoes. Tying them up to a heavy stake set firmly in the ground is quite satisfactory. The branches must be kept off the ground and some of the lower ones should be cut off if the plants become very large. Tomatoes, like the peppers, are ruined by frost, but even the green ones can be ripened by placing them on shelves in the tool room or in an outbuilding with sunny windows.

Turnips. One generally thinks of turnips as being food only for cattle, but a few white ones for Winter use should be in every garden. One ounce of seed will raise all that can be used. Sow in mid-July in drills eighteen inches apart and thin out the plants to four inches apart. They can be stored like the salsify and parsnips.

If cooked in the following way they are

not to be sniffed at. Boil enough for eight persons until quite soft; drain and rub them through a wire sieve; return to the saucepan, add a tablespoonful of butter, three of cream or of rich stock, pepper and salt to taste; cook for five minutes, stir continually so the mixture does not burn, and it is ready to serve.

Herbs. In every vegetable garden there should be a corner devoted to herbs, and a couple of packets of the seeds of each variety will raise enough plants. Being perennials, they need only to be kept free from weeds, to be covered with litter late in the Fall, and in earliest Spring to have some manure forked into the ground around them.

Sow the seeds thinly in good rich earth, and thin out the plants to about eight inches apart. Lavender, thyme, savory, and sage are the herbs of most ordinary use. Chives (or cives), though belonging to the onion family, may be grown with the herbs; they

Arbor Vitae Pyramidalis
August tenth

are perennials, and the leaves only are used for flavoring after being finely chopped.

Who does not love the faint odor of lavender on the cool bed linen, and have not many of us some childhood recollection of sage? My nurse, I now believe, thought it a perfect panacea. If we tumbled in the brook or ate green apples, a cup of hot sage tea was administered. She kept a bottle of strong, black sage tea in which was a large rusty nail, and would rub my hair twice a week with this concoction, saying that when I was a lady "'twould be the grand hair you will have." There was strenuous objection twice a week, but she always won in the end.

All the seeds (excepting potatoes) required for a vegetable garden large enough to supply a family of eight to ten persons, can be bought for about $10 to $12. Rhubarb and asparagus plants, if bought, will add to the expense, likewise to buy the tomato, celery, cauliflower, and egg plants

will cost somewhat more. But what family of eight or ten persons would not spend in six months a far larger sum in buying vegetables than the combined cost of seeds, fertilizers, and the occasional man by the day required for the garden?

I have endeavored to make this chapter on vegetables as brief and as simple as possible, to show those who have room only for a small garden, which they will probably care for mostly themselves, how easy of culture as well as remunerative the vegetable garden really is. This chapter is not meant for people with large gardens who employ several gardeners, but for those with small places who want to make a beginning, or who, employing perhaps one useful man to do most of the work, find pleasure in personally tending their own gardens to at least some extent.

FRUITS

CHAPTER III

FRUITS

WHEN the fruit trees blossom in late April and early May, the whole country where we live becomes, from the many orchards on all sides, one great garden. The exquisite pink-tinged apple blossoms, the pale pink blooms of the peach, the masses of delicate color set in the tender green of budding leaves and fresh grass, all breathing the fragrance of the Spring, make the scene one of beauty indescribable. We can understand and sympathize with the Japanese in their love of the cherry, peach, and plum blossoms, and envy them the life that makes it possible to lay work aside for a time every day and flock to the gardens, where the cult of the fruit tree and the Wistaria, of Pæonies, Lilies, and Chrys-

anthemums have been brought to perfection, and where they may steep their senses in this beauty daily, from the time the early cherry blossoms come until the petals of the last Chrysanthemum have been borne away by the winds. But how few dwellers in our cities give thought to the wonderful beauty to be seen, just a little way out in the country, when the blossoms come in Spring! And even were time available, how few among the multitude would leave the asphalt for a day merely to gaze upon the fairy-like scene! To them, living is such a tread-mill of obligation and toil and work, that many go through life with unseeing eyes for the great beauties of Nature. From the days when the stern Pilgrims, hoe in hand and musket slung over the shoulder, wrested a scanty living from the wilderness, until to-day, when millionaires travel between their country places and Wall Street by automobile, swift yacht, or special train, reading the last edition of the newspaper en

route, we have been so occupied in the pursuit of the practical, that as a people we have neglected the cultivation of the sense and love of beauty. That the whole population of a city should flock to gardens of cherry blooms, or have feasts at Wistaria time, is something we might possibly dream of, yet cannot comprehend. But success and consequent ease of life, with an ever-increasing class of nature lovers, and of those who appreciate the beauty of simplicity, are gradually leavening the multitude; and possibly within a few generations, our people may have the same love for beauty in form and color, in sunlight and shadow, in the bird on the wing, in the dwarf tree as well as the great pine, in the bud and seed pod, as well as in the perfect bloom, which now the Japanese possess in such perfection.

Fruit trees are lovely not only when masses of bloom. Can anything be more beautiful than a fine apple tree laden with fruit, or a cherry tree when every twig is

bending with the weight of glossy, red cherries, or a peach tree covered with peaches that make one's mouth water to look upon? Is there anything more ornamental than a crab apple tree with its brilliantly colored fruit; or a vine heavy with clusters of purple and red grapes; or currant bushes with their scarlet, gem-like berries?

The demand for good fruit has never been met with a sufficient supply, and there is always a ready market for any fine fruit raised beyond the requirements of home consumption.

I have always believed that a woman, thrown upon her own resources, could make a good living from a few acres of land, by the culture of asparagus, for which there is always a demand exceeding the supply, and of small fruits. If she had also a cellar where mushrooms could be raised, and would cultivate them, first in a small way, until she had gained the necessary knowl-

An entrance to the Lily garden
September eighteenth

edge and experience for their extensive culture, she would make a gratifying addition to her income.

In this chapter, I would speak of fruits only for the small home garden, their larger cultivation in orchards being a subject by itself.

Fruits should never be grown on low, wet ground where water stands in Spring or Fall; in fact, they would quickly die in such a situation. The same soil and location that make a successful garden will also grow fruits successfully. Fruit trees will do better the first year on land that has been cultivated the previous season, but when they are to be planted in sod, the ground should first be plowed deeply, all stones removed and then well fertilized.

The tall or standard orchard tree is always the best to plant. The dwarf trees are all well enough where space is limited, but one fine tree of the standard varieties is better than six of the dwarf.

Nearly all fruit trees may be planted in the Fall, but it is better to set them out in the Spring as soon as the ground can be worked. Three-year-old trees are the best to plant, and the same care must be taken in planting fruit trees as with all other trees; the hole must be larger than the roots, all broken and injured roots should be cut off and the earth well packed down and made firm around them. After planting, all trees, bushes and grape-vines should be given a mulch about three or four inches deep of leaves, litter or old manure extending out for a foot beyond the space occupied by the roots. This keeps them moist and assists the tree in making new growth.

Apples. In gardens, apple trees may be planted from twenty-five to thirty feet apart; in orchards they are usually set forty or more feet apart. The young trees must be well pruned when planted and from

one-quarter to one-half of the length of each branch cut off. Pruning is a matter of great importance to fruit growers, as all fruit trees must be pruned yearly, and the novice will find some good book on the subject, of which there are several, to be of great help.

The ground under apple trees should be kept free from weeds and grass, and the soil loose, until the tree is five or six years old. A mulch of litter or leaves over this space during the Winter, will be of benefit, and a good coating of manure with two or three pounds of muriate of potash, stirred into the ground around each tree in the Spring, will stimulate its growth. An apple tree generally begins to bear when five years old, and should have a full crop at ten years. It is a long-lived tree, and whoever plants one may reasonably expect it to live and bear fruit not only during his own lifetime, but that of his children, and possibly his grandchildren.

The care of a few apple trees is not great, but they must be attended to regularly and carefully, if fine fruit or good crops are to be expected. If the codlin moth or the apple worm, which eat the foliage, should attack a tree, they can be destroyed by spraying with Paris green when the blossoms have fallen. To prevent fungus and the various microbe diseases, the trees should be sprayed with Bordeaux mixture, first in March, again when the blossoms have fallen, and sometimes still again when the fruit has formed, and the little apples turn down on the stem. Every year, in March, all fruit trees must be "grubbed," as the farmer calls it, which consists in digging about the base of the tree from one to three inches underground, and taking out the worm and its larvae, which will be discovered by the burrows the creatures have made into the wood. They are removed by running a piece of wire into the small holes made by the borers or cutting them out with a sharp knife.

A friend told me recently, that this year he had gathered from one Baldwin apple tree that had never received any care beyond ordinary pruning and spraying, thirteen barrels of fine apples, which were sold to the wholesale dealer for $1.50 per barrel.

Each one may have his preference in the matter of varieties, but six satisfactory apples are: Baldwin, Northern Spy, Rhode Island Greening, King, Seek-no-Further, and the Sutton Beauty or the Russet.

Cherries. The sweet cherry is another long-lived fruit tree. It has a fine form, retains its foliage until late in the Autumn, like the apple tree, and is beautiful alike when in blossom, in bearing time and throughout the year. The two types of cherries are the sweet and the sour. The sweet cherry becomes in time a large tree, while the sour remains small and low-growing.

Cherry trees will thrive and do well on clayey soil when mixed with a little loam,

and will succeed better in dry seasons than other fruit trees. Like the apple, they should be three years old when planted and be set twenty-five feet apart. The trees should be sprayed with Bordeaux mixture when the blossoms have fallen, and again when the fruit is well formed. If aphids appear on the new shoots, they can be destroyed by spraying with tobacco water, which is made by steeping tobacco stems in a pail of water until it has become dark brown in color; if the curculio, the enemy also of the plum tree, appears, a sheet should be spread upon the ground under the tree, which should then be well jarred. This will bring down not only the affected fruit, but also the curculios; the insects and the bad fruit should be burned. This operation will take but a few minutes, and after the blossoms fall, should be repeated every day for a couple of weeks. It must be remembered that all fruit which is to be kept for a few days, or sent to any distance,

should be gathered when perfectly dry, otherwise rot may set in.

Six satisfactory varieties of cherry are: Black Tartarian and Black Eagle, both late Cherries; Governor Wood and Downer's Late, red; and Napoleon and Yellow Spanish, pale yellow, or "White Cherries," as they are usually called.

I well remember a tree in my father's garden called the "White Ox-Heart Cherry tree." It was easy to climb and had a comfortable crotch well up among the branches where one could sit at ease, and many a happy hour have I spent in that tree with the crown of my hat filled with fruit to eat, and "Little Women" or "The Wide, Wide World" to read.

Crab apples are used mainly for making jellies and preserves, but the tree is beautiful either in blossom or when covered with fruit, and it is worth while to have one tree in your garden if there is room. It should be three years old when set out, and culti-

vated in the same manner as the cherry. Three excellent varieties are Dartmouth, Large Red Siberian, and Hall's Imperial.

Pears. The garden should contain at least six pear trees. If well cared for, they will bear fruit during a long lifetime. The early kinds ripen in August and the late varieties will keep well into the winter, so that pears can be had from your own garden for quite half the year.

Not long ago a lady showed me in her garden a pear tree thirteen years old, of the Kieffer variety, that had never received any particular care or attention beyond pruning; yet it had always borne abundantly, and this year yielded ten bushels of fine fruit.

Pear trees will thrive on clayey soil and require but little fertilizer. Stable manures, nitrates and bone meal, all of which are valuable for other fruits, tend to produce pear blight, which declares itself by the blackened condition of the leaves. The only cure for this pear blight is in the removal

Cedar tree transplanted from the woods
September twentieth

of the affected branch at once when the trouble appears. Branches should always be sawed from a tree, never chopped, and the surface where the limb has been sawed off should be given, immediately, a coat of thick paint. A little wood ashes and some superphosphate of lime may be dug into the ground around pear trees in the Spring, and will give sufficient stimulus. Whenever wood ashes are used, do not let them come in contact with the trunk of the tree, lest they burn the wood.

There are two varieties of pears, standard and dwarf. The former should be planted twenty feet apart; the dwarf varieties ten feet. Dwarf pears are generally grafted on quince roots, and, like all grafted stock, should be planted deeply, the graft being set quite four inches below the top of the ground. The trees should be examined carefully in the Spring for borers, and the soil over the roots kept loose and free from weeds and grass.

The following are excellent varieties of Pears: Wilder Early and Manning's Elizabeth, which ripen in August; Bartlett and Flemish Beauty, in September; Duchesse d'Angoulême, Louise Bonne of Jersey, and Seckel, in October; Anjou, Easter Beurre, and Josephine of Malines, very late varieties. The last three should be gathered in October, and will keep in a cool, dry place until January or February.

Peaches to do well in orchards should be on high ground; they seem to prefer a hillside. When grown in a protected situation, the buds swell early in the spring and are often destroyed by late frosts. Peach trees will not be hurt by a low temperature in Winter unless the weather is also damp or foggy, but late Spring frosts are certain to do them great damage. In a garden they should, if possible, be planted where they will be sheltered from the west and south by buildings, evergreens or hedges, that they may not start too early in the Spring.

The peach is not a long-lived tree and has several serious enemies. The first of these is San José scale, which, being contagious, should be preventable, if the owner upon discovering it would promptly take up the tree or plant and burn it, root and branch, and then at once spray the remaining trees with the lime, salt and sulphur spray recommended by the United States Agricultural Department and generally used by fruit growers. This disease should be treated in the same manner as the Board of Health proceeds in cases of contagion, the spraying corresponding to the fumigation of a dwelling. Yellows is another contagious disease, which is recognized by the ripening of the fruit long before its due time, by the red spots on the peaches extending from the skin well into the fruit, and also by the tufts of yellowish leaves which form upon the branches. Trees so affected should be burned at once. Curculio also attacks the peach, and can be destroyed by jarring the

tree and burning the insects and infected fruit in the same manner as described for the treatment of cherry trees. The borers, or grubs, must also be dug or cut out from the trunk of the tree just below the ground every Spring and Fall.

Peach trees are usually sent out from the nurseries when one year old, and should be cut back when planted so that they look like little switches. But their growth is rapid and in four years they will bear a crop.

In a garden, the trees may be set from twelve to sixteen feet apart. Generally after eight or ten years, and sometimes sooner, the old trees are uprooted and new ones planted in other ground. There are instances of older orchards or of older single trees in gardens, but these are rare. A late Spring frost, dry weather after the fruit has formed and many other causes may prevent the trees from bearing, and they rarely bear on succeeding years. Of all the fruits in the garden, you must count least upon the

peaches, they are so shy and uncertain. But when they do bear, the fruit is delicious and you are well rewarded for all the pruning and cultivation and care.

Every year in March, the trees must be pruned and sprayed with the Bordeaux, and again sprayed after the blossoms have fallen, and a third time after the young fruit has formed if there are any signs of fungus diseases.

Wood ashes and muriate of potash are considered by many to be the best fertilizers for peach trees. Barnyard manure and bone meal are also excellent. The fertilizers should be dug into the ground around the trees early in the Spring. If muriate of potash is used, from two to three pounds for a full-grown tree is the usual quantity. The advantage of potash over other fertilizers is in the color it imparts to the fruit. The same quantity of bone meal or wood ashes could be used, if preferred. Half the quantity of fertilizer used for grown trees

is sufficient for those not yet come into bearing.

Mountain Rose, Old Mixon Free, Crawford's Early, Alexander, Lord Palmerston, Crawford's Late, and Iron Mountain are all excellent varieties. All these are strong growers and respond readily to cultivation. One or two trees of each variety would give a family plenty of good fruit from about August 20th to October 1st.

But every one has a preference in the varieties of peach, and some varieties do better in one locality or soil than in another.

Plum trees are exquisite when in blossom and beautiful when bearing fruit, but the trees are small and cannot be counted upon for shade. They are subject to the curculio, which can be destroyed by the method described before, and also to black knot, which is cured by carefully looking the trees over and cutting out every particle of black knot and burning it immediately. Plum trees should also be sprayed with

Bordeaux mixture at the same time with the other fruit trees, and the earth over the roots must be kept loose and free from weeds.

There is no better place to plant plum trees than in a hen-yard, if you have one, where the conditions seem to be particularly favorable to them. The trees should be three years old when set out, and may be planted ten feet apart. They will begin to bear in two years, and will thrive in almost any soil, clay, gravel, or loam. The following varieties of plums will be found satisfactory: Reine Claude, greenish in color; Abundance and Coe's Golden Drop, yellow; Quackenboss and Red June, purple.

Quince is another fruit used mostly for preserves. The trees are dwarf and less ornamental than others. They should be set out in the Spring, the ground well mulched and borers carefully exterminated. The trees must be trimmed and sprayed with the

other fruit trees, and some nitrate of soda and bone meal dug about them in the Spring. The best varieties are Rea's Mammoth, and Apple.

The few fruit trees grown in a garden are more likely to be free from disease than where they are grown by thousands in great orchards. Careful cultivation, with prevention by spraying and cutting, and a sharp lookout for borers and insects, will reward the gardener with beautiful trees and excellent crops of fruit to delight family and friends. A man can easily spray all the trees in a home garden in a forenoon, and the other necessary work in caring for them takes but a short time. I have often thought that if we had room for but six trees, one of them would be an apple tree, one a red cherry, and the others would be a locust, a catalpa, a white pine, and a hemlock spruce. The four deciduous trees would give us blossoms in May and June, with

Tall pointed cedars in the Lily garden
July twenty-third

cool shade throughout the Summer; then there would be cherries in June and apples in October, and always, but particularly in Winter, the two sturdy evergreens would be a daily joy.

Grapes. A few grape vines, particularly if grown over a modest pergola, or an arbor where their shade would make a pleasant place of refuge through the Summer days, give delight by the beauty of their foliage and fruit. Hardy grape vines, if they are kept in good condition, seem to bear indefinitely. I know some vines which are still bearing profusely, well into the lifetime of a third generation.

Grapes thrive in a light clayey soil which has been well enriched. The vines should be two years old when planted, and the roots must be carefully spread out and every precaution taken in setting them, which should be done as soon as the ground can be worked in the Spring. The vines must be

planted in full sun, from six to eight feet apart, and a heavy mulch of leaves or stable litter should be spread around them early in the Spring, after the ground has been fertilized with bone meal or manure.

If but half a dozen vines are to be grown, they may be planted by a trellis of stout cedar posts, sunk four feet in the ground; the trellis can be placed where it will serve as a screen. The success of the grape crop depends very largely upon careful and correct pruning, which should be done in February or March. The hardy grapes are unusually free from disease, and my own have never yet been attacked with any of the possible enemies of the grape.

Satisfactory varieties of grapes are: Concord, Isabella, and Wilder, black; Delaware, Catawba, and Rogers, red; and Niagara, Winchell and Rebecca, white.

Currant bushes make a good border for a path through the vegetable garden. They

are hardy and healthy, bear profusely, and besides the necessary pruning in Winter and some fertilizer dug about them in Spring, need no other care excepting to be sprayed with hellebore in case the currant worm appears. The bushes should be set from four to six feet apart, and two-year-old plants are best. If placed along a garden walk and planted six feet apart, Paeonies might be planted between the currant bushes, and as the foliage of Paeonies becomes very luxuriant, they will form with the currant bushes, quite a hedge.

Satisfactory varieties of currants are: White Grape, Cherry, Wilder, Victoria, and Prince Albert.

Gooseberries require the same culture as currants, but thrive best in a partial shade. Besides the currant worm, gooseberries have another enemy in mildew, but this can be prevented by spraying with Bordeaux mixture in March and April, and again still later should any signs of the trouble appear.

Downing, Houghton, and Industry are probably the three best varieties.

The blackberries, raspberries, and strawberries we raise, while not adding to the beauty of the garden, are fruits so delicious and so universally liked that, whenever it is possible, a place should be found for them in the home garden.

One of the bulletins issued by the United States Agricultural Department gives a plan for a small fruit garden, occupying a plot about 60 by 80 feet, on which the following could be grown: Six peach trees; six cherries; six dwarf apple trees; six plums; twenty blackberries; forty black caps; forty red raspberries; three hundred strawberries; thirty-two grape vines, planted at intervals of ten feet all around the plot, and eighteen dwarf pear trees. Such a small piece of ground so planted, if properly cared for and cultivated, would yield a large quantity of fruit.

Blackberries require a rich, moist, but

well-drained soil. They may be set out in the Fall, and should be planted about four feet apart in rows that are five feet apart. In the Spring, a good top dressing of stable manure should be dug around the bushes, which should be kept free from weeds, and in dry weather, until they cease bearing, the ground around them should be kept loose by frequent stirring with a rake or hoe. The plants must be trimmed when they cease bearing, and as a cane bears only one crop, the old ones must be cut out; not more than six canes should be allowed to a plant, and if others form they should be cut down. The canes should not be allowed to grow higher than four feet, unless they are to be kept well staked. Where the Winters are very severe, blackberries are either bent down and covered with earth or tied to stakes and wrapped in straw.

Among the best varieties of blackberries are Agawam and Erie, early, and Lawton and Kittatinny, late.

Raspberries, both the red and white, and the black, commonly called Black Caps, are grown in the same manner as blackberries; the canes should be cut out, leaving but six canes to a plant, and they should also be similarly protected in Winter. A berry plantation with careful cultivation usually bears good crops for five years; it is then advisable to set out new plants on other ground. Newly plowed ground should not be used for berries, but a place chosen where corn, potatoes or beans were grown the previous year. Raspberries may be propagated by root cuttings, or suckers from the roots.

Fine varieties of raspberries are: Clark, Fastolf, Kenesett, and Marlboro, red; Golden Queen and Orange, yellow; Eureka, Gault, and Gregg, black caps.

Strawberries. A fine strawberry bed is much to be desired. But strawberries, perhaps because they are such an addition to the fruit garden, are more difficult of culti-

The Lily garden in Auratum time
July tenth

vation, must be more frequently renewed, and, like many rare and beautiful things, require more labor to produce than the other small fruits. The strawberry bed should be as nearly level as possible, should be well enriched with stable manure, and have some bone meal and nitrate of soda, spaded deeply into the ground, which must be finely pulverized.

Late in August or early in September is the best time to set out the plants. A neighbor possessing a large strawberry bed is often willing to give away runners (the young plants formed on the shoots from the parent); if they are to be bought, pot-grown plants are the best. Plants that have a small crown but a good root development, are preferable; the hole for the roots should be amply large and the plants set deeply, so that only the leaves are above ground. I have always found "hill culture" of strawberries to be the most satisfactory. In this method, the plants are set twelve

inches apart in rows eighteen inches apart. Each plant is then kept free from weeds, no runners are allowed to form, and larger crops are produced in consequence. The young plants should be mulched with old manure when set out, and if the weather is dry they should be watered twice a week, as drought would be apt to kill many of them.

Late in November the strawberry bed should be covered to the depth of four or five inches with coarse hay, leaves or straw. This should be removed in the Spring as soon as the frost is out, the ground then well tilled and the same material used again as a mulch, close around the plants and over the ground between the rows, or else, if preferred, other hay or straw or clippings of lawn grass used instead. This Summer mulching is important, not only for keeping the berries clean and free from earth, but to prevent the ground from becoming hard and dry.

A strawberry bed will yield two good

crops. After it has ceased bearing the second year, allow the runners to grow and prepare a new bed; by the end of August the runners will have become nice little plants, which can be removed and planted in the new bed. The old plants should then be thrown out, the ground where they were, well spaded and left to lie until Spring, when it can be fertilized and used for vegetables. So long as the fruit continues to be satisfactory this process can be continued, but should the quality of the fruit deteriorate, a new stock of plants should be procured from a nurseryman.

There are more differences of opinion as to the variety of strawberries preferred, than in the case of any of the other fruits. Many prefer the enormous berries to smaller ones of finer flavor. The very large berries are of firmer substance than many of the smaller varieties, but seem to lose in flavor. Nor can the cultivated varieties compare in flavor with the little wild berries that one is

able to get sometimes in more distant parts of this country, brought in by the farmers' children, and also in the Alps, or Dolomites, where they ripen toward the end of July.

There are two kinds of strawberry plants,—the perfect flowering varieties and the pistillate or imperfect flowering. The pistillate varieties must be planted with or near the perfect flowering, so that the bees and winds may carry the pollen from the perfect to the imperfect flowers. It may be best to plant only strawberries of perfect flowering varieties to insure a crop, for should heavy rains come when the strawberries are in blossom the pollen may be washed away. A row of perfect flowering strawberries should be planted to every two rows of the pistillate or imperfect flowering varieties.

Strawberries are seldom attacked by disease, but occasionally rust or mildew appears. These troubles can be held in check by spraying the young plants with Bordeaux

mixture when they are first set out, and again when they have finished blossoming.

Good varieties of strawberries are: Haverland and Bubach, pistillate varieties; Michel's Early and Bederwood, early perfect flowering; Lovett, McKinley, and Brandywine, late perfect flowering.

Melons A melon patch requires considerable room, as the hills for the vines should be at least six feet apart each way, and there should be twenty hills each of water melons and musk melons. The soil should be light and sandy or the melons will not succeed. The ground to receive them must be well cultivated, and the place chosen for the melon patch should be as far removed as possible from cucumbers and squash. It is better also to separate somewhat widely the musk melons from the water melons. The culture of both is alike. Hills should be made six feet apart and ten seeds should be planted in a hill, after all

danger from frost has ceased. Some leaf-mould, old manure and a little bone meal, dug into the hills, will be a stimulus to the melon vines, which should be grown in full sun and given every aid to mature rapidly.

Insects are apt to attack the young vines, which should be looked over every morning and the insects destroyed. The vines may also be sprayed with Bordeaux mixture or tobacco water. When the vines are a foot in length, all but four plants should be taken out from each hill. Some vines are generally destroyed by insects, this being the reason for planting an extra quantity to provide for loss.

Netted Gem, Hackensack, Rocky Ford, and Newport are good varieties of musk melon, and Hungarian Honey, White Seeded Ice Cream, and Mountain Sweet are desirable water melons.

The greatest difficulty in raising fruit in the home garden, as we have found it, has

been the marauding proclivities of the neighbors' boys. The appetite of the small boy, and sometimes, alas! of the small girl, for apples, pears, and cherries, enables them to overcome all barriers, however high, and circumvent all diligence, however watchful, to procure the coveted fruit, and no pangs are too severe to endure for its sake, often taken when far from ripe, as the child's mother later learns from a wakeful night.

The idea of "mine" seems to be well and clearly developed, but the definition of "thine" is hazy and incomplete. It is strange how badly brought up "other people's children" often appear, while it seems that one's own are generally little white angels! To the birds we willingly give their portion of the fruit, and when the small boy generously allows us a share, even a little fruit garden will amply repay the owner for the time and money spent upon it.

A LITTLE ABOUT TREES

CHAPTER IV

A LITTLE ABOUT TREES

IT is with hesitation that I have ventured to approach so large a subject in a limited space. A landscape gardener to whom I confided the fact that this little book would contain a short chapter upon trees that might be useful to the amateur, turned a withering glance upon me with the remark that "when Mr. Blank's large two-volume work upon trees is comparatively elementary, what can you possibly say in one chapter that will be useful?" Of course I was deeply humiliated and could make no fitting reply. But the idea remained with me. I knew my own aversion to searching through comprehensive works of many volumes when I needed only a little practical information, and have, therefore, taken courage again to write briefly

about some trees of vigorous growth, hoping that the amateur may find it helpful.

The native trees of the locality where you live are sure to flourish. The climate and soil suit them. They will bear transplanting well, and, if carefully attended to, are quite sure to live. Drive around the country, notice the trees growing by the roadside or about the older places and farm-houses; see what trees are in the woodlands, and after deciding what you want, order them from some good nursery, or, what is more interesting, get them from the fields and woods.

Deciduous trees must be transplanted either in the very early Spring as soon as the ground can be dug, or in late October, after the leaves have fallen. If you own no fields or woodlands where young trees are growing, then go about the country until you find what you want; if you think they can be obtained, make friends with the farmer (it will probably be a farmer) who owns the trees; he will undoubtedly be glad

White Birch, eight years after being planted as a small tree about four feet high
September seventeenth

to sell them to you at a reasonable price, and also, as farm work is not pressing in late October or at the end of March, to dig up and deliver the trees to you for the price of a day's work. But don't trust him to do it without oversight, unless you know that the man has had experience and been successful in getting out trees, and, above all, have it understood and *insist* that the roots must be whole, if there is a tap root, that it shall all be there, that the tops shall be uninjured, and, in fact, that the whole tree be in good condition.

If a few trees only are to be transplanted, you will be interested to go yourself and watch them dug out, to be sure that every precaution is taken. Have some old stable blankets or large pieces of burlap ready to cover the roots of each tree as soon as lifted, so that they do not become dry, and do not allow more trees to be taken up than can be moved to their new home and planted the same day.

More care must be taken in transplanting trees from the woods and fields than with nursery stock. In nurseries the trees are frequently moved, their form carefully preserved, the roots pruned, and packing for transportation reduced to a science. But a tree that you have seen growing in a fence corner or in a woodland, whose transplanting you have personally superintended, will be more an object of fond pride and dearer to you, than the nursery-grown tree that comes in a box by express.

If possible, always have your nursery stock sent by express. This is important. Freight is slow, and plants and trees often become so dried out by the long transit that they cannot survive. Last Fall I lost a number of plants sent from a Western State because the orders to send by express were misunderstood and the box reached me as freight after being three weeks on the way. The actual loss was made good, but there was the annoyance and delay.

There are many native shrubs to be found growing in the fields and by streams, that are worthy of a place in any garden. They are easy to transplant and quite sure to live. They must be well pruned, however, and quite half of the tops should be cut off.

Among the shrubs to be found in the fields are the sweet-briars, alders, black chokeberry, elders, witch hazel, and the splendid sumac. In many localities the *Rhododendron maximum,* laurel, and the pink azalea, none of which should ever be trimmed, can be dug from the woods with but little trouble.

Many vines are also to be found growing against old fences or twining about trees. These may be carefully dug up, the tops somewhat cut down and brought home in triumph, to plant by the veranda posts, to cover a rustic summer house, or to twine about a trellis. Four of the best of these wild vines are Virginia creeper, bitter sweet, wild clematis, and the wild grape.

I care infinitely more for the trees, deciduous and evergreen, the rhododendrons and other things that I have had transplanted from the woods and fields, and succeeded in making happy in their new home, than for anything that we have bought from nurserymen.

When you have once acquired the taste for transplanting from the country side, there is no overcoming the desire. You become more observant, and when walking or driving, you look upon the trees, shrubs, vines and flowering plants along the road or in the fields with an eye to bringing them home some day. I know now of a straight, healthy tulip tree, about twelve feet high, growing on a tangled roadside some miles away, which I have often thought about during this Summer and Fall. Some day I shall make friends with the farmer, who probably does not care about or even know of its existence, and hope to persuade him to let me have the tree.

Young Irish Yew
August tenth

I have always preferred to plant deciduous trees in the Spring, and have had extraordinary success. The hole to receive the trees must be deeper and larger than the roots, and in the bottom should be placed a quantity of well-rotted manure, which must be covered with about four inches of good earth free from lumps and stones. Then set the tree, which one man should hold upright, while another, after spreading out the roots carefully, shovels in the earth, which should be top soil, well pulverized. When the hole is about half filled in, turn on the water and thoroughly wet the ground below and all about the roots. The rest of the earth can then be filled in and pounded down, and the ground around the tree covered with a mulch of coarse manure. If the weather is dry, the tree must be well watered twice a week and the earth soaked to the roots; the tree will then be quite sure to live.

When visiting recently in a beautiful country town not far from New York, where

every place both large and small was neatly kept and generally well planted, I came one day, when walking, upon a man engaged in setting out a row of trees along the road in front of a house. They were pin oaks, unusually fine young trees, and the row of them was probably a hundred and fifty feet long. The ignorant creature had dug holes barely deep enough to cover the roots in the clay soil, which was like hard pan. This he did not pulverize or loosen, but merely hollowed out a sort of basin, the bottom and sides of which were perfectly smooth and hard. Into these hollows the roots of the trees were placed, and the earth, full of pieces of sand-stone, was then shovelled back upon them. For three successive days I returned to see these trees and their planting, which the man finished in this time, and observed that no good earth, no fertilizer, no mulch was used, and that during that time none of the trees were watered. How can even a brave and hardy

Cut leaved Maple, eight years after planting as a tiny tree
September seventeenth

oak tree survive such treatment, and how can the tender rootlets find their way into so hard and uncongenial a soil? I shall make an expedition to this same town next Spring for the special purpose of seeing the condition of those trees.

A tree ten years after planting should have attained a good size, give a fair amount of shade and be a beautiful object. But cultivate modest expectations as to the growth of the trees you plant, and think only of those who are to come after you and enjoy the shade, and new surprises will be yours each year. I have never planted a tree without thoughts of possible grandchildren who would enjoy its beauty.

There is a legend that a great-grandmother in our family, riding as a bride with her young husband to their new home, almost in the wilderness, planted her riding switch used the last day of the journey, at the foot of the avenue leading to the house. The switch had been cut from an elm and retained so

much life, that it took root and grew and has become a mighty tree, which is still pointed out to visitors as an object of interest to all who hear the story connected with it. The ground must have been damp and the conditions unusually favorable that the little switch, so long after being cut from the parent tree, should have been able to survive.

If large branches of good form are cut from willow trees in early Spring and thrust deeply (say two feet) into the ground in any damp spot or on the borders of a pond or stream, they will readily take root and in a few years become good trees. These branches should be well staked until firmly rooted.

Avoid planting trees, no matter how desirable they are, which in your locality are likely to be attacked by borers, as, for example, the chestnut in many States, and the elm by beetles in parts of New England.

DECIDUOUS TREES

First and best of all, though not of so rapid growth as other trees, are the white oak and the pin oak. These two trees must be severely pruned upon transplanting.

Next perhaps in value are maples. The sugar maple is a beautiful tree whose foliage makes a dense shade in Summer and becomes a glory of color when touched by frost in the Autumn. The Norway maple, fine in shape and quick growing, and the cut-leaved maple, of rapid growth, with drooping branches and delicate foliage, are especially valuable varieties.

Ailanthus is one of the fastest growing trees and will thrive in any soil. The foliage is almost tropical; but the female tree should always be planted to avoid the blossoms, which have a disagreeable odor.

The American ash and the beech tree of our own woods make grand trees. Both of them require severe pruning when trans-

planted. The rarer varieties of copper and purple beech have beautiful foliage and a well-grown specimen of either of these trees is always greatly admired.

The cut-leaved weeping birch and also the white birch, which is found in many woodlands, are of rapid growth and have a white bark which makes them objects of particular beauty.

Chestnut, hickory, and black walnut are all fine trees, the black walnut perhaps the best of the three.

The European bird cherry, known to us as the wild cherry, and the black cherry, which also grows in fields and woodlands, are both desirable trees.

Dogwoods are to be found in many woodlands. Mark the spot in the Spring where they blossom and transplant them in the Autumn.

The catalpa, with its immense leaves, orchid-like blossoms, and rapid growth, is invaluable for effect. I had always sup-

posed this tree to be perfectly hardy, but the only two on our place, which were set out eight years ago and had grown trunks over two feet in circumference, were killed from the top half way down by the severe cold of last Winter. I waited until the end of June and then had the dead tops cut off and the remaining branches pruned to give proportion to the height, and though at present they appear somewhat stunted, a couple of years will probably bring them into shape again.

Catalpa Bungii and the pyramidal evergreen are about the only trees that should be grown directly in a flower garden, as flowers will not thrive in a shade.

Catalpa Bungii are small trees with the large leaves of the catalpa. They are catalpas grafted on straight stems or standards of from five and a half to six feet tall, to give good effect. They should be set out in the Spring and kept carefully tied to stakes and well mulched. Every year, in

March, they should be trimmed back to what the gardeners call "two eyes," in order that they may form large heads. Thus trimmed they are similar in form to the bay tree and give the same formal effect, when planted singly at the top of a flight of steps, on either side of the end of a path, in rows on a terrace, or at equal distances on both sides of a walk.

Catalpa Bungii are hardy as far north as New York, or have always been considered so, but last Winter over forty of ours, old, well-rooted trees, were killed, although others in the same latitude, but nearer New York City, endured the severe Winter without harm. It seems, however, to be only the graft that dies, as the stems were in every case alive. In future, I shall have the grafted tops protected by wrapping in straw or other suitable covering.

There is no hardier and more beautiful tree than the American elm, but it is so often the victim of the beetle and cater-

pillar that its beauty becomes greatly impaired.

The horse chestnut is a perfectly hardy, rapidly-growing tree, with beautiful foliage, and is covered with blossoms in May.

The form of the larch, with its feathery foliage and its hardiness (in Europe it grows on mountain slopes almost to the eternal snow), makes it a most desirable tree.

The tilia, or linden, is a rapid-growing tree attaining large size. The most satisfactory varieties are the American linden, to be found in many woods, and the European, or silver-leaved linden. These trees seem to be hardy and thrive in any situation.

The locust is another tree of rapid growth which attains great height. From the end of May, for about two weeks, they are covered with white blossoms of delicious odor, which attract the bees for miles around. The early settlers on Long Island must have had great fondness for this tree, as so

many of the old homesteads there are embowered in them.

The *Magnolia conspicua* and *Magnolia Soulangiana* can be grown either as small trees or large shrubs. In intensely cold localities they are somewhat difficult to bring through the first two or three Winters, but if given some protection by driving evergreen branches into the ground about them, they will generally survive. They grow rapidly when once well established.

Everyone knows the value of the Lombardy poplar in giving emphasis to the landscape; when properly planted they are very effective.

I have been told by landscape gardeners, that the Lombardy poplar no longer flourishes to great age in this country as formerly, and as it still flourishes abroad, one man of great experience saying to me that he did not know of a single perfect row of these trees that had been planted within the last twenty years, in every case some having died

Catalpa Bungii, four years old
July seventeenth

and others having begun to die at the top. When a branch dies it should be sawed off immediately and the place given a coat of thick paint; the tree is then likely to put forth a new branch. But the Lombardy poplar grows so tall and slender that should a branch die near the top ten years after planting, it would be difficult to get at it to cut it away. On our own place, settled by a Huguenot some hundred and fifty years ago, there are magnificent Lombardy poplars growing about an old family burying ground, and it is a fancy of mine, that they were planted by the original settler in memory of the poplars of the France he had left in his youth. These trees are only now beginning to die. To continue the old Huguenot love for the trees, I have recently set out a row ten feet apart and three hundren and fifty feet long on the upper side of the gardens, and hope they may be exempt from the fate of the modern poplar and as long-lived as their predecessors on the farm.

The growth of the Carolina poplar is so rapid that it is most valuable as a screen. Many poplars are native in our woods and bear transplanting easily.

The sycamore, or plane tree, growing straight and tall, is beautiful in appearance, but untidy from the continually peeling bark, which makes a litter all about it.

No tree is handsomer than the native tulip, which grows to a great height, has large, glossy leaves, and bears lovely yellow-orange tulip-shaped flowers at the end of May.

Purple and copper beech, tulips, catalpas, birch, magnolias, and Lombardy poplars should be set out in early Spring, so as to become well established before Winter. Dogwood and larch start so early, that it is better to transplant them in the Fall; the other varieties mentioned may be transplanted equally well in Spring or Autumn.

Trees of hardwood, such as oak, ash, and hickory, need more pruning when trans-

Three Evergreen trees dug from the woods
July twenty-third

planted than soft-wooded trees. Pruning requires knowledge and skill, and those who plant should inform themselves upon the subject.

Unsightly caterpillar nests that often appear on certain trees and shrubs can be easily destroyed by taking pieces of old cotton material, binding them with wire around the end of a long pole, saturating thoroughly with kerosene, then lighting, and with this gigantic torch burning the nests and the caterpillars.

EVERGREENS

Too much cannot be said in favor of evergreen trees. They are beautiful objects, give depth and background to all growth in Summer, and are a blessed delight in Winter, either as the only bit of green in a brown and desolate landscape or as a contrast in the snowy scene when the great branches bend under their load of white.

Evergreens, particularly large ones, are

difficult to make live, unless they have the sandy soil they love. In localities where the soil is of clay, it will be rather a struggle to get them well started. This done, however, they rarely die.

In planting evergreens, it is a good plan and well worth the trouble, to make a hole about three feet square and put in the bottom of this a good loam, to which a quantity of sand and very old manure has been added, then a layer of three or four inches of earth; plant the trees and fill in the hole with more earth of the same composition, watering well, and the tree is almost sure to live and make rapid growth. A little extra digging in making the hole to receive the tree, so that the roots have encouragement to put forth into good loose soil, will make the greatest difference in the growth of the tree.

Leaf-mould and old sods which have been finely chopped with the spade are the best fertilizers to use when planting ever-

greens, but if these cannot be had, the properly prepared earth, taking care that no manure comes in contact with the roots, will be sufficient.

There is a great difference of opinion as to the best time for transplanting evergreens. Many persons say, that they should only be set out in the Spring, while others contend that the last two weeks in August and the first two in September is the proper time. I have set them out at all times from early April until the middle of September, but in taking young pines, hemlocks, and cedars from the woods, have had the best success by transplanting them when the first new shoots appeared. In February of this year, however, the men transplanted some beautiful tall pointed cedars from the woods into the Lily garden, the trees being moved with great balls of frozen earth about the roots. They were all from fifteen to twenty feet in height, and of eight but one died, and this occurred probably because

the entire work on this tree was not finished the same day. Having large, heavy roots, it was only possible to dig them up with a ball of frozen earth. These trees give such an appearance of age to this garden that no one could imagine it was not yet eighteen months old.

Some of the native evergreens, the white pine, hemlock and the many varieties of cedars, as they are called by the uninitiated, —junipers I believe they really are,—transplant easily and are to be found in many localities.

The cedar, growing tall and pointed, is regular in shape, as if sheared yearly, and is an excellent substitute for the cypress of Southern Europe. Landscape architects have learned to appreciate its value, and are now using these trees with fine effect. They have a perfect columnar growth and take the place of the handsome pyramidal evergreens of rare varieties used in formal gardens. Young cedars have a tap root,

Standard *Retinispora Plumosa*
August twenty-seventh

and when taken from inland pastures, which are their natural haunt, will generally be found growing closely against a large stone or rock. It seems that the seed falling there finds shelter from the hot sun, and severe cold, and that the young shoot is thus better able to struggle through the first year or two. A tree five or six feet in height will generally be easier to transplant than one of but three feet, for the tap root will have been absorbed in the larger tree. I have spent many interesting mornings first selecting my trees, and then watching them dug up.

Evergreens are more difficult to transplant than deciduous trees, for they usually grow where it is stony. But if you once get the tree out with all its roots, keep it from drying up, and plant it carefully, it is almost sure to live. Four good sized trees, say six feet high, are as many as two men can dig up in a morning. The larger trees, as already noted, can be successfully moved only

in Winter, and it is a day's work for three or four men to get out and plant one tree, unless the conditions are unusually favorable.

When planting shrubberies with evergreen trees and shrubs for a screen, they can be placed closely together at first and thinned out as they grow. I have two or three such shrubberies, from which it seems always possible to take out an evergreen and a shrub with benefit to those remaining, so quickly do they grow.

The *Arbor vitae pyramidalis,* of close growth and lending itself easily to shearing, is one of the hardiest and most satisfactory evergreens for formal planting.

The Irish juniper is another beautiful pointed tree with blue-green foliage, but it is not hardy in severe Winters. Last Autumn I protected mine, first by spreading a heavy mulch of stable manure around them and then by driving three cedar trees cut from the woods into the ground about each tree, tying all together with heavy cord, but they

did not survive. Pyramid box treated in the same way also died. In future I shall have the box trees and other tender evergreens lifted from the ground, planted in boxes and stored through the Winter. In cold localities where the thermometer may drop to forty degrees below zero and not rise above ten below for six weeks at a time, as it did last Winter in our part of the country for the first time within the memory of the oldest inhabitant, it is best to take extra precautions to prevent great disaster in the garden.

In a newspaper last Spring I read the statement, which struck terror to my heart, that some astronomer had announced that the cold, wet Summer of a year ago followed by the severe Winter, was due to spots on the sun, denoting abnormal atmospheric conditions; that it would take nine years for these spots to disappear, and that accordingly the weather for nine years would be unusual. There may be nothing in this sup-

position, or it may be true, but it is well for every gardener not to take any chances.

In my garden the severe Winter of 1903-4 caused many losses. Coming out the middle of April to spend a few happy days superintending Spring work, I found a sad state of things. Besides the *Catalpa Bungii,* Irish juniper and the standard box trees, all the privet hedges, most of which were the common privet, supposed to be hardy, were killed to the ground. All the Crimson Rambler and Wichuriana Roses were dead nearly to the ground, and, although they grew tremendously during the Summer, trellis and rose arches were bare until late in the season. Every Honeysuckle on the place was entirely killed, and all Clematis, Wistaria and Trumpet Creeper had died to the ground. During the Summer they have, however, sent up shoots of surprising growth, as if to recoup their reputation of being hardy plants. Deutzias, eight feet high, and also *Vibernum plicatum* were killed, while more

Horse Chestnut tree (slow growing) eight years after planting
September fourth

than half the low-growing Roses were dead to the ground, and the budded ones have this Summer grown only Sweet Briar bushes —a warning lesson never to buy Roses except on their own roots.

The hybrid Perpetual and other Roses that survived, produced great quantities of flowers. I have never seen finer blooms of Baroness Rothschild, Margaret Dixon, and Kaiserin Augusta Victoria than those of this year in my garden.

As I walked about my beloved garden on that April day and saw the sad havoc wrought among the plants by the cold Winter, sorrow and despair, such as the gardener will understand, took hold of me. Tears are the most futile things in the world and serve only to make one homely and unattractive and a nuisance to others, but when the men went off to dinner I retired to the farthest corner of the place and, with only my dog to see, who whined in sympathy, wept bitterly. But courage and a determi-

nation not to be overcome, quickly came to my aid, and a short time after I was preparing lists for new plants and trees to make good the Winter's damage.

The spruces (*Abies polita, Abies pyramidalis*) and the arbor vitae (*Thuja Vervaeneana* and *pyramidalis*) are hardy trees of pyramidal form, suitable for use in a garden because of their compact growth.

The Irish yew is another decorative evergreen, but it must be well protected from the Winter's sun and from too great cold. Japanese cedars, the *Retinispora* group, are all compact in growth and submit themselves to shearing. The *Retinispora squarrosa* has beautiful feathery blue-green foliage.

The *Retinispora plumosa,* or Japanese cypress, has a delicate foliage and may be grown on tall stems with heavy heads like the standard bay trees. It should be grown in tubs, however, and may be removed in Winter to the house for decorative effect, or stored in a cellar that is not too cold.

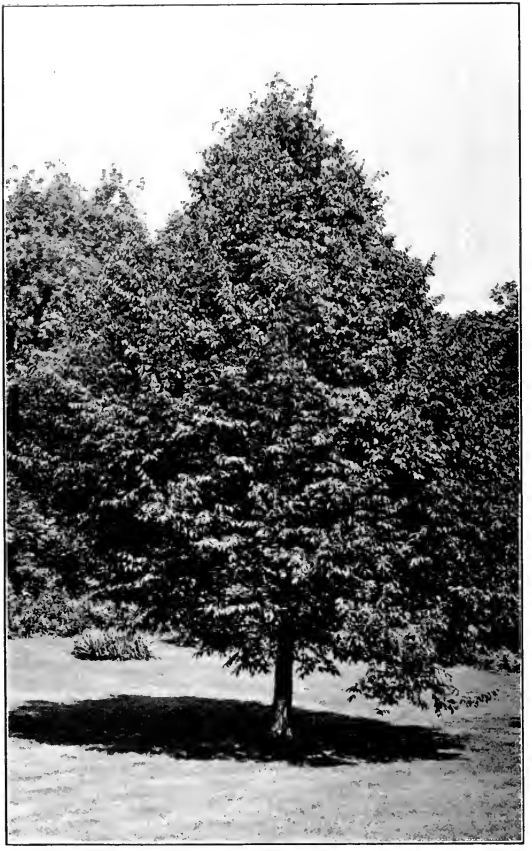
A light, frost-proof cellar for storing roots and small, half-hardy trees, such as box and bay, is as necessary a requisite for a large garden as a properly equipped tool house, and enables one in this climate to have the pleasure of certain beautiful things that otherwise it would be impossible to keep through the Winters. In case there is no cellar, tender evergreens, such as *Retinispora squarrosa,* Irish yews, junipers, and standard or pyramidal box, should be protected by a heavy mulch of manure spread over the roots and close up to the stems of the tree, and by binding rye-straw or corn stalks about each tree and tying all together with cord. Winter sun shining on the frozen foliage seems to do the damage, and both straw and corn stalks keep the sun away and yet admit sufficient air.

Beware of setting hens, storks standing on one leg, pigs with curly tails, and other animals cut in box-wood that some nurserymen display. It is true they are curious,

but to give animal form to a tree can never be other than bad taste.

Horace Walpole, in his essay on "Modern Gardening," first printed in 1771, criticises the fashion that "stocked our gardens with giants, animals, monsters, coats of arms, and mottoes, in yew, box and holly," remarking that "absurdity could go no farther;" and again, after inveighing against "the tricks of water works to wet the unweary, not to refresh the panting spectator," says: "To crown these impotent displays of false taste the shears were applied to the lovely wildness of form with which nature had distinguished each various species of tree and shrub. The venerable oak, the romantic beech, the useful elms, even the aspiring circuit of the lime, the regular round of the chestnut, and the almost moulded orange tree were corrected by such fantastic admirers of symmetry."

Of large-growing evergreens suitable for the lawn, there are the Austrian pine and



Hop Hornbeam, a rare and slow growing tree of compact form, eighteen years after planting
September twenty-second

Scotch pine, the Norway spruce and the Colorado blue spruce, Nordmann's fir and the Colorado fir. These are all hardy and of rapid growth. But avoid planting tall evergreens near the house, for their dense foliage shuts out sun and light, and gloomy rooms are the result.

The end of August is the best time to shear arbor vitae, spruce, box trees, hemlocks, retinispora, and, in fact, all evergreens. By this time they have completed their new growth, and will have time before the cold weather begins to recover from the shearing, which sets them back somewhat. The shearing not only preserves the natural shape of these trees, but causes them to grow thicker and handsomer.

After your horse and dog, there is nothing that can better inspire love than a beautiful tree which you have yourself planted, pruned and cared for. If undisturbed, the life of the tree will go on for generations after the short span of human years has

come to an end, and will be a comfort and a blessing to your children's children. Sitting in its grateful shade in Summer, the rustling leaves will tell to the imagination tales of the one who planted it and of those whose lives have been lived beside it, and in Winter its bare brown arms stretching against the sky will speak of the resurrection of the year and the coming Springtime, when green leaves will crown it anew, and bring the reminder, "though dead yet shall ye live."

The following lists of a few useful trees and shrubs may be of service to the reader:

SIX VERY SATISFACTORY TREES WHICH ARE COMPARATIVELY FREE FROM THE ATTACKS OF INSECTS, LIVING TO GREAT AGE, AND GIVING FINE SHADE, ARE:

Oak,
Locust,
Tulip,
Copper Beech,
White Birch,
American Ash.

SIX SHRUBS THAT ARE HARDY, RAPID GROWING, ATTAIN LARGE SIZE AND BEAR BEAUTIFUL FLOWERS, ARE:

White and purple Lilac, French varieties,
Japanese Quince,
Syringa grandiflora,
Althea Jeanne d'Arc, pure white,
Deutzia graeillis,
The native Azaleas from North Carolina,
particularly the Arborescens, white,
Arborescens rosea, pink, and lutea, flame color.

These Azaleas should be given a northern exposure and heavily mulched in Winter with evergreen boughs driven in among them.

FOUR OF THE BEST HARDY TALL GROWING EVERGREENS, ARE:

Colorado Blue Spruce,
Colorado Fir,
Hemlock,
White Pine.

FOUR OF THE BEST HARDY EVERGREENS FOR USE IN A FORMAL GARDEN, ALL OF THEM PYRAMIDAL IN FORM, ARE:

Native Cedars,
Thuja pyramidalis (Arbor Vitae),
Abies pyramidalis,
Thuya Vervaeneana.

ANOTHER HARDY GARDEN BOOK

FIVE HARDY SHRUBS GROWING ABOUT SIX FEET IN HEIGHT BEARING HANDSOME FLOWERS OR BERRIES, ARE :

Hydrangea grandiflora paniculata,
Oak leaved Hydrangea,
Lonicera alba, standard Honeysuckle,
Viburnum plicatum, Japanese Snowball,
Berberis Thunbergii—Barberry,
Rose Acacia.

SIX OF THE HARDIEST VINES THAT WILL WITHSTAND VERY LOW TEMPERATURE, ARE :

Bitter Sweet,
Clematis Paniculata,
Enonymus Radicans (Evergreen),
Sweet Scented Wild Grape (Vitis Odorata),
Virginia Creeper,
Wistaria.

Thuja Vervaeneana
August twelfth

PERENNIALS AND OTHER FLOWERS

CHAPTER V

PERENNIALS AND OTHER FLOWERS

WHEN one whose experience in gardening has been bounded by a few varieties of bedding-out plants like Geraniums, Coleus, Salvias, and Petunias, begins to plant perennials, she is apt to be disappointed with the first year's results. She has seen great clumps of perennials in a friend's garden, has read of their beauty, has seen pictures of them in catalogues, but when her Paeonies bear no blossoms, her Phlox has only two or three heads of bloom, the Larkspur one or two spikes of varied blue, and the Valerian, Veronica, Monkshood, and Hollyhocks all flower sparingly, she cries in her heart for the bedding-out plants which were her mainstay in former years. Let her have patience, however, and

wait for the second Summer of the perennials. Coleus will then no longer find a place in her garden, and the number of Geraniums planted will be reduced to a minimum.

Would that the Coleus might vanish from the land! But, after all, it is not the plants, poor things, but the people who grow them who are to blame.

Geraniums cannot be condemned to the same extent, for they bear flowers, and have besides done valuable service during all the years when gardening consisted largely of beds of every conceivable shape, filled with them, of one color or another. They do not reach perfection before July, and die with the coming of the early frost.

No matter how small may be the place devoted to flowers, plant it with perennials, fill in the chinks with hardy annuals raised from seed, and there will be flowers of many varieties to bloom from May to November.

Perennials increase in size and beauty

from year to year, and by separating the roots when well grown, the stock can be increased indefinitely. The same money formerly spent upon bedding-out plants will buy bulbs, perennials and shrubs in quantities, which will beautify your grounds to an extent undreamed of in the days when the bedding-out plants held masterful sway in this country.

This year nearly all the Larkspurs in my garden were seven feet tall, and many of the plants grew so large that a man unaided could not reach around them to tie to the necessary stakes; and there were also seven shades of blue among them; the Hollyhocks sent up five and six great stalks, many of them eight feet in height; the *Boconia cordata* rose far above a tall man's head; the *Spiraea aruncus* was six feet high; Cardinal flowers, Phlox, and many Lilies grew to unusual sizes, and nearly all the flowers blossomed before their accustomed time; in fact, all plants that survived the great severity of

the previous Winter seemed to have benefited from the cold.

Last Winter many hardy plants that perished in our part of the country lived under equally low temperatures in other places. Evidently these particular plants were not accustomed to the unusually low temperature, zero or a few degrees below having been the maximum of cold they had previously experienced, while in other places, although as cold, or even colder, the temperature did not, as with us, fall below that of previous Winters. Foxgloves and Canterbury Bells, usually entirely hardy, suffered greatly; so did the Gaillardias; the *Helianthus florus plenus* was killed; but Tritomas, young plants, too, not considered very hardy, came finely through the Winter, the foot of mulch with which they were covered having completely protected them.

There is no more decorative plant for tropical effect that can be grown in the front of a shrubbery or planted at the back

Vase of *Campanula Pyramidalis*
August twenty-first

of a border than *Boconia cordata.* The leaves, immense in size and beautifully indented, are rather a bluish-green in color, and each stalk bears a plume of feathery white blossoms, often eighteen inches long. The first year, this plant may not be taller than three or four feet, but seen when two or three years old, no gardener will be without it. The roots can be separated and it can be grown easily from seed.

Last September I made acquaintance at Botzen, in the Austrian Tyrol, with a plant of exceeding beauty. Arriving late one warm afternoon after a tiresome journey, we came into the cool, shaded, white marble hall of the hotel, and on either side of the foot of a fine stairway, rising from a bank of Maidenhair fern with a background of Palms, was a new plant. Slender stalks, quite six feet high, whose entire length was covered either with white or palest blue bell-like flowers, rose against the green of the palms. I began to ask questions in my

rather imperfect German before going to my room, and the wondering hotel clerk, who doubtless thought another mad American had appeared to cloud his serene horizon, could give no information about them beyond saying that they were supplied to the hotel by a florist whose address he would give me.

The next morning, an early expedition was made to the florist's garden, where we found the admired plant in all stages of growth. But the gardener was crusty, and even a generous *douceur* had little softening effect. He *had* no seeds; he was not sure where he bought the seeds; the plant did not bear the tall stalks until two years old if wintered in a cold frame, or three years if grown in the open ground and protected in Winter by a heavy mulch; and, last of all, the name of the plant, *Campanula pyramidalis,* was dragged from him. I determined to have these flowers in my garden, and set about their pursuit at once upon my return.

A single plant of *Platycodon*
July tenth

Seeds of these plants, whose common name is Chimney Bell flower, are listed in many catalogues, but my impatience to have the plants blooming in the garden was too great for me to wait the two or three years necessary for raising them. This Spring I was able to make a beginning with only two dozen; and they have done fairly well, but do not compare with the wonderful plants of Botzen. They were attacked by the same white grub that is the enemy of the Larkspur, and six were destroyed before I knew it, but coal ashes lightly dug into the ground around them with a small trowel proved a specific. The flowers appeared the first of August, and continued to bloom for more than six weeks, but the stalks were only four feet high and the best plant bore but five of them.

From the middle of June until the third week of July, *Penstemon barbatus Torreyi,* which has a small flower of vivid scarlet growing on tall, slender spikes that in their

second year have reached six feet in height, makes a brilliant patch of color in a border and attracts much attention.

Penstemon Digitalis has heads of white flowers fully nine inches long, is a plant which blooms all through July, is hardy, increases rapidly, and is most effective.

Another hardy white flower, about as large as a twenty-five cent piece, with a pale pink center, which grows on long stems, is *Agrostema alba.* The plant is about three feet in height, and has somewhat sparse gray-green foliage. New flower-buds form continually in the axils of the leaves; if the flowers are cut as soon as withered the plant seems to bloom indefinitely, and is valuable for this reason. I have amused myself during this Summer by cutting the faded flowers from a clump of these plants and from one of Centaurea, with the result that they have continued to bloom profusely from June until the middle of September.

Every gardener knows the value of not

allowing the seed pods to form and weary the plant by taking the strength that otherwise would go to new root-formation. In fact, every plant that blossoms is benefited by cutting, which enables it to produce flowers in greater abundance, and to make larger root growth.

Dictamus fraxinella, both the white and pink, with particularly beautiful glossy foliage, are valuable plants. Absolutely hardy, the roots increase rapidly, and may be separated from time to time. The flowers blossom the end of May and are borne on strong stems in panicles about eight inches long.

The new varieties of hardy Carnations, such as the Margaret and the Perpetual, produce most creditable flowers, not so large, certainly, as the many beauties that the florist's art brings forth, like "Mrs. Lawson" and "Fiancée," but quite fine enough in form and color to satisfy the grower of hardy plants. Sow the seeds in early May,

in finely pulverized, rich soil, with which a little bone meal has been incorporated, and about the first of September transplant them to the places where they are to remain. The seeds are very sure to germinate, and an ounce will raise a large number of plants. I keep mine in long rows so that a cultivator may be run between them. The plants can be set out about eight inches apart, and should be tied to stakes, as the stems grow very long. If carnations are well watered from the moment the first sign of a bud appears, they will not only be more prolific in bearing, but the flowers will be larger, just as the Japanese Iris repays a thorough drenching several times a week. After three years it is a good plan to raise fresh Carnations, as the flowers become small and the blossoms scarce. Cover the plants with some leaves or litter in November, when the rest of the garden is put to sleep.

Perennial Lupins, both blue and white, blossom freely in early June, growing from

Vase of Giant White Poppies
July tenth

two to three feet in height, and are hardy and effective. It is a good plan to soak the Lupin seed for twenty-four hours before sowing, which should be done in mid-April.

Liatris, a plant growing about five feet in height, bears immense spikes of light purple flowers and continues in bloom throughout August.

Veronica longifolia blossoms during August and is one of the handsomest blue flowers in the garden, in fact, after the Larkspurs, probably the handsomest. The plant is perfectly hardy and increases rapidly. Like the Phlox, every shoot bears a spike of fine blossoms nearly a foot in length; these are of a beautiful blue color. The common name of the flower is "Speedwell," and I never see it without thinking of Austin Dobson's poem, "Sing Blue of Speedwell and my love's eyes."

Another blue flower that is but little grown, is Greek Valerian, a plant about a

foot high, which is so completely covered about the end of May with delicate blue flowers as to be like a bit of sky fallen into the border. I have but one plant, sent me from her garden by a friend whom I have never seen.

Another lady whom I have not the pleasure of knowing, very kindly sent me some seeds a year ago. The name and the description of the flowers which the seeds should produce were lost, but the seeds were sown in May, came up quickly and during the summer, grew to be large strong plants. Set out in beds in the Autumn, they came unharmed through the severe Winter and in the Spring grew to be four feet high with strong, wide-spreading branches. They were rather a disappointment, for the flowers seemed to be only faded, yellow morning glories. But the first evening late in May, when the weather was warm enough to entice us into the garden after dinner, there stood the great plants covered with a mass

A clump of *Veronica Longifolia*
August tenth

of flowers of delicate texture, larger than the largest Japanese Morning Glory, and of a pale yellow color. They bloomed continuously for over two months, and were nightly objects of comment and admiration by all who saw them. They were the *Oenothera lamarchiana* or Evening Primrose, and I am told it is unusual for the plants to grow so large. They appear to best advantage when planted in front of low growing evergreens, whose impenetrable foliage gives them an effective background.

By the third year the Platycodons become large, strong plants, quite three feet high, each bearing possibly a hundred blossoms. When planted in clumps of three or four together they are very effective. Their period of bloom lasts from the middle of July for a month or more, the blossoms appearing when the Larkspurs are first cut down and continuing well into the reign of the *Veronica longifolia.*

Boltonias are also effective plants for the

edges of shrubberies. They grow from four to six feet in height, and from the middle of August to the middle of September are a mass of blossoms which are quite like the small wild Asters. The white variety is *Boltonia glastifolia,* and the pale pink, *Boltonia latisquama.*

Besides the Boltonias, the following hardy plants flourish and look well on the edges of shrubberies: *Boconia cordata;* Hollyhocks; Jerusalem Artichoke, which grows eight feet tall and bears single yellow flowers late in September and through October; Marshmallow (*Hibiscus moscheutos*); Japanese Tree Paeonies; Columbines; Trilliums; Oriental Poppies, and hardy Sunflowers. Various clumps of these plants will give successive bloom and color in front of the shrubbery from May until November.

Several years ago, when planting a new garden I decided to have the flowers in each border of one color only. A friend to

whom I confided the scheme said it would not be successful; that when the blue border was in its prime, the pink one would be without flowers, in fact, that the four borders would never be equally handsome or all in such a condition at the same time, that their color would at once strike the eye. But this has proved to be a mistake. The borders are always full of color from the end of May until everything is killed by the frost.

At the back of each of the borders Hollyhocks were planted closely together, white in the white border, pink and red in the borders for those colors, and, as I know of no blue Hollyhocks, pale yellow ones were put at the back of the blue border. Other plants were set in clumps of four to six, with four or more clumps of each kind. Summer flowering bulbs and annuals were then planted about the first of June in all the crevices to help out late August and September.

In the blue border were blue Columbines; the one plant of Greek Valerian, which was blue for a month; then there were German and Japanese Iris, Larkspur in many shades of blue, each of which gave three crops of flowers by cutting each stalk as soon as it ceased to bloom; blue Canterbury Bells (*Campanula glomerata* and *Campanula macrantha*); *Scabiosa Caucasia;* Platycodon; Veronica, and Monkshood. Still another hardy plant with blue flowers was *Verbena venosa,* which will either grow about eighteen inches high or can be pegged down and will during three or four months cover the ground with its heads of blue flowers. As annuals, I planted Ageratum, which had been raised from seeds sown in hot-beds the first of March; pale blue Centauria, Emperor William Centauria, and blue Asters.

The pink border had *Spiraea palmata elegans;* a number of clumps of pink Phlox, each clump of a different shade; *Lilium*

rubrum; Agrostema; Carnations; and for annuals, pale pink Balsam; *Asters; Phlox Drummondi;* and a quantity of pink Gladioli, which were planted about the 10th of June.

The white border had three clumps of *Boconia cordata;* a quantity of Foxgloves, planted in the back close against the Hollyhocks; white Canterbury Bells; several clumps of *Hyacinthus candicans;* white Platycodons; four great clumps of Japanese Iris, which are beautiful objects for a month; white Phlox of both early and late varieties. As the flowers in these borders are kept only for show, by breaking off the heads of the Phlox immediately upon their ceasing to bloom, the Phlox seems always to be in blossom. There were also white Rockets; a quantity of Valerian; white Columbine, and a number of *Lilium album.* White Balsam, Asters, Sweet Sultan, and Gladioli were also planted.

The red border was more difficult to ar-

range because of the many shades of red; but in nature these do not seem to clash as so often do the different shades of the same artificial color. There were scarlet Lychnis and also Cardinal flowers, which seemed to flourish there as well as in their native haunt by the stream; the red Penstemon; *Spirae palmata; Tritoma Pfitzerii,* which begins to bloom in July and continues until the frost lays it low; Phlox of the variety Cocliquot, which is a mass of scarlet. Some Poppy seeds thrown in here and there in early Spring gave many gorgeous blossoms in July, coming up at random among the other plants. Several clumps of Salvias and some bright red Cannas gave continuous bloom, and red Asters, Cockscomb, and scarlet Gladioli helped to make brilliant color for the September garden.

These borders are, each of them, four feet wide and seventy-five feet long and hold many plants.

It will be noticed that no yellow and no

Boconia Cordata
July seventeenth

purple flowers were admitted to any of these borders. In another garden it will be interesting to arrange these colors in the same way. But so many flowers are excluded by this treatment of colors, that borders thus planted would be a very incomplete garden by themselves.

It is also interesting to watch the different color phases of the garden and to see how certain colors predominate at certain times. For instance, at the end of May and for about three weeks, pink, white, and deep reds dominate all the other colors in our gardens. There are in blossom at that time Syringas, *Spirae Von Houttei,* hardy Poppies, Paeonies, Foxgloves, Sweet William, and the hardy Roses;—each of these flowers in large quantities.

As these gradually pass, we become aware that blue and white flowers are prevailing; there are Canterbury Bells, Foxgloves, Japanese Iris, Centauria, and the great

Larkspurs. Then suddenly along in July, the color scheme becomes red and white; Poppies, Phlox, Crimson Ramblers, Penstemon, Lychnis, Salvias, Cannas, the tall white Auratums, *Boconia cordata,* and Iris.

Then for a time no one color makes itself felt, but all prevail equally until in late August, when white and yellow become dominant; white Lilies, Hydrangeas, and Altheas; Rudbeckia, waving its great branches of golden blossoms in every breeze; lovely Calendula in many shades of yellow; tall, flaunting, orange Marigolds; Sunflowers; Coreopsis, and Gaillardias.

And when, at last, the relentless frost comes to blacken and destroy our garden by one cold night, the colors seem more glorious and varied than at any other time; and Cannas, Gladioli, Salvias, late Lilies, the third blossoming of the brave Larkspurs; Gaillardias; Phlox; hardy Sunflowers, and many annuals are in their prime.

But the Japanese Anemones, the Chrysanthemums, Monkshood, and some faithful Roses stay by us until quite thick ice has formed. If you have a few plants each of Madam Plantier, Clotile Soupert, pink Soupert, La France, Mrs. Lang and the Jubilee Roses, you will be able to cut a handful of these flowers every day from the end of May until late in the Autumn.

The annuals come in most successfully for filling in among perennials and for giving flowers in late Autumn;—such as Asters, of which one can never have too many, Zinnias, Cosmos, Cockscomb, Centauria, Sweet Sultan, *Phlox Drummondi,* Calendulas, Balsam, the pale pink and the white, whose flowers are as large as Camelias; Snap Dragon, and Stocks. These last two plants should be started very early and are most effective when set in large masses. I buy only the seeds of white Stocks, but, alas! there are always purple ones among them, as mistakes

are sometimes made by the most careful seedsmen.

Godetias are valuable annuals, giving for the three months from June until September continuous bloom in purple, red and white flowers, white blotched with red, and pink spotted with crimson. They should be set a foot apart and do well in a somewhat poor soil and in partially shaded places. If the seed pods are cut continually they make a long period of bloom and are as satisfactory in a border as *Phlox Drummondi.*

In a bed containing three dozen plants of *Tritoma Pfitzirii,* set two feet and a half apart to give full room to spread out as they became large, I planted scarlet Zinnias to fill up the rather sad-looking bed for the first Summer. Imagine the horrible effect when in mid-July both plants began to bloom at the same time—Tritomas orange scarlet and Zinnias salmon pink. Supposedly scarlet Zinnia seed had been sown, but it proved upon blossoming to be pink.

Vase of *Platycodon*
July tenth

Seeds of Hollyhocks often fail to produce flowers like those of the original plant from which they were taken, as the bees probably mix the pollen. And self-sown Phlox is almost sure to revert to the original purple.

Every year when the Phlox blooms I find purple and magenta blossoming against scarlet and pink, and, because it is not possible for me to root out a plant in flower, I tie strips of black cambric low down around the stems of such plants, that they may be recognized and removed when the Autumn work is being done. If, however, all the purple Phloxes are placed somewhere in a mass, together with a quantity of the white, they become at once an object of unusual beauty.

The seeds of Salvias germinate easily and by sowing them in a hot-bed or in a box in a sunny window early in March, plants can easily be raised which should begin to blossom the end of June. The seeds may even be sown in finely pulverized soil in the

open ground by the middle of April, if given some protection on frosty nights, and the plants will begin to bloom in August.

In a bed where Salvias bloomed last year, *Lillium album* were planted the first week in April among Tulips that were just putting up their green heads, so that the soil was disturbed as little as possible. Later, white Asters were planted in the same bed wherever there was space. When the time arrived for the first weeding of this bed, forty seedling Salvia plants were taken from it. The seeds had fallen the Autumn before, and the germ of life had survived the long, cold Winter.

If anyone is so fortunate as to have a stream running through her place or a small pond, let her rejoice greatly and see what beauty she can develop around it. The effect should be natural, as if the hand of man had taken no part therein. Willows should be planted first for the background,

and then great clumps of Rhododendrons. The tall grass *Arondo donax,* the tall and tropical-like *Boconia cordata,* Japanese Iris, white Lysimachia, commonly called "Loosestrife"; Hibiscus, red Bee Balm, Eupatorium, tall-growing with large heads of old-rose-colored flowers, Cardinal flower and Ferns from wet places are a few of the hardy plants that will flourish in such a situation.

The Water Hyacinths, and the double-flowering Arrow-head, which bears white blossoms on spikes two feet tall, can be grown on the very edge of the pond where the water is only two or three inches deep. In planting, firm the roots well into the mud.

Of hardy Water Lilies, the English *Nymphae flava, Nymphae odorata rosea,* the Cape Cod Water Lily, deep pink in color, with the *Nymphae odorata,* our native white Water Lily, should give the amateur a sufficient number of aquatics with which to

begin the water garden. The *Nymphae* should be planted about the 15th of May. It is generally enough to press the root well into the soil of the pond, but if the mud does not seem to be rich, then the Lily roots can be planted in boxes of very rich soil and sunk in the pond. Directions are occasionally given to tie the root to a stone, and throw it into the water, but the Lilies will be more apt to grow if planted directly into the soil of the pond or stream. These lilies are hardy and can be allowed to remain in the water.

One can learn something from almost every garden, no matter how humble. In walking about a town or village, I often pass a simple door-yard slowly two or three times, and sometimes hang over a fence to see what is within. There may be plants which I do not know, or a specimen of some variety brought to a finer degree of perfection than I have ever been able to attain with

A little pond ready for planting
October ninth

the same flowers. A good gardener, like a great painter, or a fine musician, is always lenient with the failures and shortcomings of the beginner. Knowing too well his own trials and struggles, he can sympathize with and overlook the mistakes of others. It is well, therefore, never to look with a critical eye upon the weeds among another's flowers, lest you should some day become aware of those in your own garden.

It is, also, always possible to find gardens far more beautiful and more elaborate than our own which we have worked over and dreamed about and which is dear to us, but we can admire and learn from the success of others, and still return with a contented heart to our own little corner of the earth.

My own garden lies in a long, rather narrow valley, bounded on either side by ranges of high hills, which we call "mountains." Through the center flows a stream, which still bears its mellifluous Indian name Wawayanda, because of its curving, winding

course through the broad meadow lands, where mild-eyed cattle graze in the luxurious grass. Great trees line both its sides, and on every hand oaks, black walnuts, chestnuts, ash and maple trees are interspersed with dark cedars. Cultivated uplands join the thickly wooded hills, and the quiet beauty of the scene so wins upon us that when the valley beautiful lies spread out before our eyes upon returning from journeys across the sea, we give thanks that our lives have been cast in so lovely a spot.

At the upper end of the valley is a prosperous, busy town, with handsome country places, inn, golf club, and much of the environment of modern existence. In Summer, life goes merrily with the people there, who drive gaily about in all manner of equipages, clad in fair attire. This is all very attractive; but a spirit of greater charm surrounds a little hamlet some miles down the valley where it broadens so as to be no longer narrow. Here a few quaint houses

straggle along the roadside, tall trees tower above their roofs, and gardens surround them, where great bushes of Box and clumps of grandmother's flowers are grown. Time has left the hamlet untouched. No noise, no hurry, no bustle disturb the atmosphere. Life goes gently there and peace seems to brood over it with folded wings.

Back from the street, surrounded by a shady lawn, is the tiny church with raftered ceiling where our family has worshipped for generations; a church where twenty people are a fair congregation; where each has from childhood known the older people, and seen the young men and women brought as babies to be christened; and where for many years the rector has been a dear old man with snowy hair, beloved by all, who also give him from their hearts the affectionate title "Father." He knows the hopes and fears, trials and joys of all his flock and makes their joys and sorrows his. The service over, the congregation waits to take his

hand and to greet one another before parting for the week. Some walk to their nearby homes and others drive away for miles over the hills to their houses on distant farms.

Behind the church are sheds for the protection of the horses of those who drive. Frequently I drive myself in a low phaeton to the church, and my own mare, an animal of great intelligence whom no one else is allowed to use, understands perfectly when Sunday comes, and almost without guidance makes straight for the little village and the tiny church. She is a creature of superior and somewhat haughty manners, and not only domineers the other horses in the home stable, but fairly browbeats those with whom she comes in contact in the church sheds. They, faithful creatures, mow great fields of hay, plow, and draw heavy loads, and the light task of taking their families to church makes Sunday for them a day of rest. My petted animal hears their tales of the hard

Vase of *Dictamnus*
May twenty-fifth

week's work, and recounts to them her life of ease, telling how her only labor is to take her mistress upon pleasure drives. But last Summer her pride met with a downfall and her haughty spirit was brought low. The weather being very warm, I bought her a hat, bound the holes cut for her ears with red and adorned it further with a gay red *chou*. She wore it proudly for a few days; then came Sunday. Out of the church shed she came that day with a sadly subdued air; seemed to have no spirit; hung her head, and returned home so dejectedly that I feared she might be ill. The next day the united strength of two men could not put on that hat. She had been laughed at and jeered at by her companions in the shed for her frivolity in taking to millinery, so that her pride was broken and she learned the lesson of meekness.

The South wind sweeps up our valley at all seasons, gently at times,—fanning us tenderly on warm Summer days, and giving

us a soft zephyr on nights that without its cooling breath would be unbearable. At times, it deserts us for days, coquettishly allowing us to realize how much we rely upon it in its milder moods, and again, when vexed, it comes almost like a tornado, shrieking aloud in its wrath. The great trees sway and bend in its blasts, tall plants are laid low, and much damage is done by its rage; and because of this south wind, tall plants and young trees must be well staked. But much judgment is required in tying up the flowers; while due support must be given them, the strings should never cut the tender stalks, and a clump of tall-growing things must not be tightly tied around the middle to produce the effect of a slender-waisted young woman.

There can be no doubt upon the question of the gain in health and strength to those who live much in their gardens and do active work among growing things. A couple of

May twenty-fifth
Vase of Columbines

hours spent in weeding or transplanting, or in tying up climbing Roses and vines, gives exercise to unused muscles, keeps one lithe and supple, and forbids the dreaded adipose tissue to put in an appearance.

For those who are "getting on," whatever private opinion may be as to that period, garden exercise is a sure preserver of youth. The arms are raised above the head, one bends from the waist, gets up and down on the knees, all of which is exercise which is not work but delightful play. It is wonderful, too, how large a part of your life the love of gardening can become, what an absorbing occupation, and what solace in time of sorrow. A friend who has had one garden for fifty years, met with a terrible grief not long ago, and after a few months she wrote me, "You will be glad to know that the Comforter comes to me more directly through my garden than through any other earthly source."

Once, in Rome, I was taken painfully ill

after three busy weeks spent in seeing the wonders and glories of the city. Nothing gave me relief, I had no rest by day, no sleep by night. Even recalling to my mind the miracles of art recently seen could not divert me from the suffering, but thoughts of the far-away garden, its present state, the flowers then blooming, what should be planted in the coming Autumn, what new work should be undertaken in the Spring, served as an anodyne, and brought to mind some words written years ago in our house-book:

"When tides of life run irk and stern,
Think of the farm at Meadowburn."

A single blossom of white Japanese Iris
July fourth

A GARDEN OF LILIES AND IRIS

CHAPTER VI

A GARDEN OF LILIES AND IRIS

SOME years ago I heard of "A Garden of Lilies," a garden where nothing else was grown. The phrase and the description of this garden remained in my mind and the desire to have one where Lilies particularly should be grown took great hold of me. In my imagination I saw the tall, graceful stalks crowned with their beautiful flowers, cut the lovely things and breathed their delicious perfume. After reading all that I could find upon the cultivation of Lilies, and studying the catalogues, I finally made a beginning.

The place where I planned to have this garden had been for years a garden where small vegetables had been raised. The ground sloped slightly towards the southeast,

enough to continually wash the top soil to the foot of the slope, which was partly corrected by terracing; the soil was hard and clayey and had never made a very successful vegetable garden. The first thing was to plan the best arrangement of the space.

Some time before, a friend had given me a plan of her garden, which was old when the Revolutionary war was ended. Washington and his officers had walked there, and for the hundred and thirty years that had passed since those days the place with its beautiful garden had remained in the same family, loved and cared for in every generation.

This old garden has the formal-shaped, Box-edged beds seen in all Colonial gardens. The Box, tall and thick, entirely fills the beds in some places, and the bushes of old-fashioned Roses, Paeonies, Madonna Lilies, and many of the other old-time flowers have grown on, increasing in size and beauty, while generations who have tended them have followed each other to their last long sleep.

Hydrangeas around the pool
July twenty-third

The straight Box-edged paths, and the formally shaped beds surrounded with Box, are found in all of the early gardens, the idea having been brought over from the old country by the colonists who planned their new gardens here, after the manner of those they had known and loved at home, and grew wherever possible the flowers they had tended across the sea.

The English and early American formal gardens were a modification and simplification of the elaborate Italian gardens, where architectural structures, tall cypress trees and ilex and myrtle hedges were the principal elements.

To many persons who have never been gardeners themselves, or studied the pleasing art, all formal gardens are Italian gardens, and since making this new one I have spent much time in explaining, that it is not an Italian garden but a Colonial one, designed from a garden made in America about 1760.

Having longed for the sound of falling water among the flowers, it seemed that now was my opportunity; so a pool, round, twelve feet in diameter and three feet deep, was planned for the center of the garden. First the place was excavated and the water pipe and connections with shut-off valve and back drainage put in place; then a wall of stone about eighteen inches thick was laid up in cement, the bottom concreted and the overflow pipe laid to a loosely stoned-up blind cistern made below the level of the bottom; this also served to drain out the pool in winter, the water soaking away through the loose stones into the earth.

The pool finished, the surface of the entire garden was covered with a thick layer of manure, on which was spread about three inches of muck taken from the bottom of a pond that was scraped for the purpose. Lime also and sand were added to mellow the stiff soil. The ground was then thoroughly ploughed, harrowed several

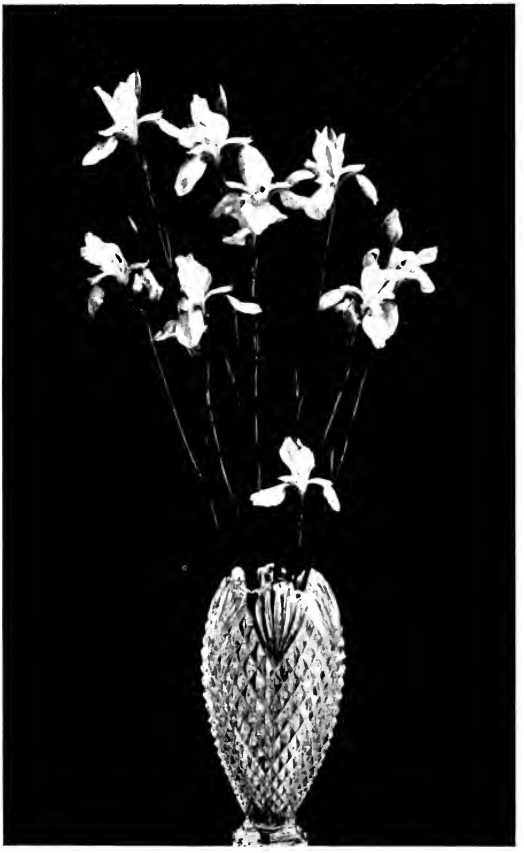
times, spaded and carefully raked. Then with stakes and garden cord the beds were marked out, and again spaded and thoroughly prepared, the whole garden again raked, and the place was at last ready for planting. The pool was begun in early April, but various delays made it the end of May before the garden was finally laid out. The beds were surrounded with Box-edging and many pyramidal evergreens planted.

On June the fifth, the space between the beds was sown with grass seed, an unheard-of date, and as it was too late to think of Lilies for that year, the beds were sown the following day with Asters.

For seven weeks there had been no rain, and, worse still, no wind, and the wind-mill did not pump and the great reservoir supplying the gardens became dangerously low. Early in June I sailed away for Europe in a sad state of mind, begging the men to cart the water if necessary to keep the Box and evergreens alive.

Scarcely did I dare all Summer to think of this garden, and no mention of it was made in any letters received, so that upon our return the middle of September I went to look at it, expecting to see a bare expanse. broken by dead evergreens and brown Box-edging; but the rains had begun the very day we sailed, and the Summer had been cool with frequent rains.

It was just sunset when we reached home that September day, and as I stood on the marble steps, looking down upon what my imagination had portrayed as a dead garden, it seemed as if a miracle had been wrought. The evergreens were green and flourishing, the Box-edging was covered with tender shoots of new growth, the grass of the paths was thick and free from weeds and the beds were filled with blooming Asters, of which there were certainly hundreds in each bed, and although three colors had been used, white, palest pink, and faint blue, each bed contained but one variety.



Vase of Siberian Iris
May twenty-fifth

In the pool the *Nelumbium speciosum* spread its great blue-green leaves and two of its pink lilies with golden hearts rose on tall stems above the water. The pale colors with the fresh green setting seemed in the soft sunset-light almost unreal after the sad expectation that had so long filled my mind. Any garden lover will sympathize and understand my great delight.

In October, when frost had killed the Asters, the beds were finally prepared for the Lilies and Iris which they were then to receive. Over each bed was spread a layer each, of old manure, leaf-mould, bone meal, wood ashes, phosphate, and a sprinkling of air-slaked lime, the beds were then spaded and re-spaded so as to mix the new constituents thoroughly with the soil already there, and then came planting time.

But for a moment let me digress and again say a word upon the preparation of the soil, for in this lies the great secret of success in gardening. Make it deep and

rich and light, giving to the plants the food they require, and, with weekly cultivation and an occasional soaking to the roots if the weather be dry, you cannot fail to have a successful garden.

People continually ask me, "What is the use of making the beds so deep?" and "Why not put the enrichment on the top of the ground?" If you make a garden with beds but a foot in depth, the plants may struggle along for a year, but look at them the second year and see their stunted condition and poor bloom, and in comparing such a garden with one properly made, the answer is found. If there is a foot of good rich soil *below* the roots of the plants and all the rest of the earth is equally good, the plants are enabled to resist a drought that would otherwise cause them to cease blossoming, and in ordinary weather to reward the gardener with a wealth of bloom. Good garden soil, with some sand to lighten it if too heavy, and plenty of old stable manure are all that

need be used for the garden. But for a small garden a bag each of bone meal and phosphate, with some wood ashes occasionally used sparingly, will help the plants along surprisingly. Anyone can make leaf-mould, which is a valuable addition, by saving the rakings of the Autumn leaves and turning them occasionally until the following Autumn, when they may be dug into the beds. I do not intend to touch the soil of my Lily and Iris garden for at least four, and possibly five, years, beyond giving it every year a mulch of fine manure or leaf-mould when the plants are well up in the Spring.

All Lilies will flourish in rich loam to which a good proportion of sand has been supplied, and once planted, they should not be removed as long as they are doing well.

But if the leaves fall from the stalks and the bulb seems unhealthy, it should be carefully dug up, any part of the bulb found in a bad condition removed, the bulb dried

with a soft cloth and shaken in a paper bag containing powdered sulphur, and replanted immediately. Miss Jekyll recommends this use of sulphur and I have tried it with good results.

It is always a problem how to arrange a garden so that it may be flowering from May until frost, and here were seven large beds to be filled with Lilies and Iris only, and yet kept blooming throughout the season. Of *Iris Germanica* there were pure white, pale yellow with violet markings, yellow and brown, and various shades of purple and blue; the lovely "Madam Cherau," white with a frilled edge of light blue; many varieties of Japanese Iris, white ones predominating, however; Florentine Iris and the English variety Mont Blanc, both of these also white; Siberian Iris, white veined with yellow, and also violet ones; Spanish Iris, growing tall and stately and bearing flowers of wonderful coloring. The foliage of the Spanish Iris

Vase of "Brazilian Lilies"
June eleventh

is so like the wild onion that I was filled with alarm when I saw the beds in the following April and immediately dug up a bulb to satisfy myself that a crop of onions had not appeared by magic; and, last of all, Chinese Iris, but this did not bloom, although flourishing and green, with foliage quite similar to the Germanica.

The different varieties were laid out on the floor of the tool room, divided into seven parts, and then planted in the seven beds, some of which were larger than others.

Of Lilies there were *Auratum, Speciosum Album* and *Speciosum Rubrum, Longiflorum, Brownii, Batemanni, Krameri, Leichlinii, Rubellum, Chalcedonicum, Excelsum, Superbum, Wallacei, Canadense,* and *Hemerocallis,* the yellow Day Lily, in all eight hundred Lilies and five hundred Iris.

The Lilies were divided into seven parts like the Iris, and each bulb was set in sand, a foot in depth, and the small varieties from four to six inches deep. Some were planted

in clumps of one or two dozen of a kind, but the rarer and more expensive varieties had only from four to six in a group.

The names of the Lilies somewhat phased the men. I asked one the name of the bulbs on a large package he had just laid down. After a moment's study, he replies, "Oh, they're the Long-i-fellows."

The last of November the beds had a heavy cover of coarse manure. I was afraid of stable litter or leaves, for fear that field mice might burrow in and eat the bulbs. Then came the terrible winter with a degree of cold which that wise person "the oldest inhabitant" described as unknown in his lifetime, and with it the fears that little in the new garden would survive. But the kindly snow spread over all a warm white blanket, which remained from December until March. The garden was uncovered the last of March and by mid-April the beds were green with the shoots of Iris and the bronze-green of the

Vase of striped Japanese Iris
July fourth

stout Auratum Lilies, and every sunny day new plants appeared to see what the world was like.

A lady sent me some bulbs which she called "Brazilian Lilies." These bulbs were planted the end of April among the other Lilies. They came up shortly and grew rapidly, beginning to bloom about the end of May and continuing for three weeks. The flowers are quite different from any I have ever seen, the heart of the Lily being pale green shading to yellow, with yellow anthers, and each blossom has five outside petals with fringed edges. The bulb also is unlike other bulbs, being of a consistency between a Bermuda onion and a beet. They are tender, requiring to be stored like Gladioli during the Winter. After blossoming, the plant makes a beautiful foliage that in itself is most ornamental. I wish I knew where these bulbs might be procured, as they are the greatest addition to the Lily garden.

Tiger Lilies are not grown in this garden,

but flourish and increase on the edges of shrubberies and along a stone wall, which latter place seems to be their natural habitat.

The lovely Candidum, too, has no place in this garden. It does not like our soil or my treatment, and after buying hundreds with scant success I have abandoned their culture.

The German Iris began to bloom on May 20th and continued for three weeks. The Florentine and Siberian Iris both began to blossom on May 25th and shortly after these came the English Mont Blanc. By June 10th the Spanish Iris unfolded its first blossom, dark brown with a tinge of purple and a dull gold heart, and one day the third week in June the first Japanese Iris, white with a golden ray through the center, appeared to bid me good morning as I walked through the garden; I cut the last of these Japanese Iris the 3rd of August.

The fragrant yellow Day Lily, *Hemerocallis florham,* was the first Lily to open its petals in the new garden, about the 25th of

Spanish Iris
June eleventh

May, and bloomed freely for about two weeks. Next to begin blooming after the stranger from Brazil were the lilies Krameri and Rubellum, which appeared about June 15th. They are quite alike in form, foliage and color; the latter a soft pink, like the lining of the conch shells we have seen on mantles in farm houses, treasured reminders of the distant sea. Next came the Auratums, on July 4th, surprisingly early, for elsewhere on the place they did not appear before July 20th. This, however, gave us the Auratums for nearly two months, as the last one was cut about September 1st.

At the same time Canadense, a native Lily, began to flower and was disappointing, as it bore less freely than those growing wild in the meadows of the farm. The wild ones, however, grew on ground that could more strictly be called wet rather than damp. The Canadense has two varieties, flavum yellow and rubrum red. Each bulb bore from three to five lilies.

While the Auratums in the lily garden were in their prime, the Longiflorums unfolded their white trumpets and were beautiful for three weeks, and before these passed away the Lily Brownii appeared, growing on stems about three feet in height, with one or two trumpet-shaped flowers, in form like the Longiflorum. These lilies are white on the inside, the outside shaded with brown and purple.

They were followed the third week in July by the Chalcedonicum (the scarlet Turk's Cap), a lily of the Martagon type. These lilies grow in a small cluster at the top of stems about four feet high. They are not large, only three inches across. At the same time the Japanese Lily, Wallacei, began to flower. It is apricot in color, spotted with brown and very large, and has generally but two lilies on a stalk; the stalks are not over three feet in height.

The Lily Batemanni bloomed first on July 25th; it has flowers of a warm shade of

apricot without spots, growing generally in groups of three blossoms, on stems about four feet tall.

Lilium Leichtlinii, a Japanese Lily, also bloomed during the first ten days of August. I found it very beautiful and delicate, of a pale yellow color, with purple markings on the inside. The stems seemed frail, and although one or two bore two lilies, there was generally but one on a stalk, and I fear that this Lily will not bear another year.

Superbums bloomed all through August, and the petals of the last one fell the very end of September. The stalks are about five feet in height and each stalk bears certainly twenty lilies. I am told that this variety, when well established, increases in quantity of bloom until there are often thirty flowers and the stalks eight feet high. The flowers are crimson-orange and remind one of the Tiger Lily.

The middle of August, while the stately Auratums still lingered in the Lily garden,

the lilies Rubrum, and Melpomene which is quite like Rubrum but more brilliant in color, and the beautiful wax-like *Lilium album* appeared; and, of these, the ones protected from the frost did not cease blooming until the second week in October.

One other Lily, Gigantium, said to grow six feet high, was planted, but not in the garden. It required "a cool woodland," according to Miss Jekyll, so a corner was found under tall trees where Rhododendrons formed a background; a large place was dug out and filled with specially prepared soil, and, with a petition to the goddess Flora, the bulb was carefully planted, only one, because they are expensive—three dollars apiece—and this was an experiment. Three weeks, a month, five weeks, went by and no sign from the bulb. Impatience could no longer be restrained, and with care it was dug up. Alas! the bulb was nearly gone. The soil or climate or something was

A clump of white Japanese Iris
July third

unpropitious, and thus I was unable to have the handsomest of all the lilies.

By the first of June every inch of space in the beds was filled with Asters, Gladioli or tuberous-rooted Begonias. Each bed had one of these varieties of flowers.

These Begonias, which are a most beautiful flower of waxy texture, quite four inches across, were started in hot-beds the first of March, began to blossom in early July and continued until killed by hard frost. The bulbs may also be planted in the open ground in May as soon as danger from frost is over. Plant with the hollow end of the bulb up, and cover with two inches of earth; they will begin to blossom early in August. Both the foliage and the flowers are beautiful, and they are so easy of cultivation, that no one will regret having them. They prefer a partial shade, but when given a mulch they do perfectly in full sun. The white are the handsomest; afterwards the pink and scarlet.

In the Autumn the bulbs should be taken up, after the foliage has been destroyed by the frost, carefully dried and stored through the Winter. It is a frequent practice to pack the bulbs in boxes of dry sand, the bulbs not touching each other, and then to store the boxes in some suitable place, but for the last two Winters I have kept them in baskets in an ordinary cellar, side by side with similar baskets of Gladioli, Dahlias, and Cannas, and they have been in perfect condition in the Spring.

The Begonias began to flower early in July, the Asters and Gladioli the middle of August, and all continued to bloom until the frost came.

Other than Lilies and Iris, this one annual and the two summer-flowering bulbs were all that were admitted to this garden. To observe the Iris and Lilies as they came into bloom was most interesting, but of the many varieties of Lilies there are, after all, but few that are entirely satisfactory, and

fewer still that can be counted on to increase. Of the latter there are the *Speciosum album* and Rubrum, which last thrives best in a partially shaded location, or if given a heavy mulch can be grown in the sun; Canadense, Superbum, the Tigers, Krameri, Rubellum, and the yellow Day Lily. Beautiful ones which we cannot do without and yet which disappear after more or less time, are the Auratums, Longiflorums, and *Brownii.*

The old-fashioned Funckias, called "Day Lilies" by our grandmothers, require too much space to be admitted to the Lily garden, but are grown in masses elsewhere, and I often wonder whether the clusters of slender white trumpets or the great yellow-green leaves are most beautiful. Funckias, like the Paeonies, should be undisturbed, and for the first two or three years not much should be expected of them; afterwards the number of blossoms will increase every year.

In the pool there were *Nelumbium speciosum*, the pink Egyptian Lotus, a tender Water Lily. If the season is early they can be planted about May 15th. Fill a flower tub or butter tub, which must first be made perfectly tight, with equal parts of cow manure and garden loam which have been carefully mixed. Contrary to common opinion, it is the soil that nourishes aquatics, not water. Plant the Lily roots nearly at the top of the tub, covering only with about two inches of soil well pressed down. If a bulb or shoot has formed, be careful to allow it to project above the soil. Finally cover the earth with about two inches of sand, which prevents the soil in the tub from discoloring the water. If you have no pool or pond, the Nelumbium or the English Nymphaes or our native Pond Lilies can readily be grown in a kerosene barrel sawed in half and sunk in the ground to the rim, in some effective place where it will have full sun, generally in

Nelumbium Speciosum
September twentieth

front of a shrubbery or with a background of low evergreens. Half fill this with soil, plant the Lily, not forgetting the sand, fill up with water and from time to time replenish the water to replace that which has evaporated.

Water Lilies are beautiful alike in flower and leaf. The delicate petals of the pink Nelumbium with its great golden calyx, the flower when extended being quite twelve inches across, and the velvety leaves often measuring twenty-two inches across, the first to appear resting on the water and later ones rising on straight stems two feet or more above it, make this plant an object of unusual beauty. Nothing can be more interesting than to watch its daily growth.

Every few feet around the pool, just back of the wall, English Ivy is planted, which as it grows is fastened down with hairpins, those most valuable implements of femininity, and will, it is hoped, in time surround the edge of the pool so that the water will

be framed in green. The ivy can be protected in Winter by a covering of leaves and some evergreen branches. In the pool are several varieties of fish, among them goldfish, which not only add to its beauty, but devour the larvae of the mosquitoes which otherwise might breed in the fresh water.

Many birds nest in the gardens: blackbirds, robins, gray wrens, the faithful phoebe birds, who return year after year to the same nesting place, and raise two families every season; orioles, whose nests hang from the branches of the tallest trees; yellow birds; meadow larks; humming-birds innumerable, darting from flower to flower with lightning-like rapidity; black and white woodpeckers with scarlet heads, which live in the tall old locusts and share these trees with the blue-jays, which are always at enmity with the robins and also fight the red squirrels to preserve nests and babies. Last year a pair of quail nested among a mass of Phlox, and later went away to the

upland fields with eight plump, well-grown little ones.

These birds have appropriated the pool as their favorite bathing place; alighting daintily upon a great leaf of Nelumbium, the crystal water in its hollow forms their bath, and from a little distance you may see them dip and splash and then alight upon a near-by branch, or upon the tall stalk of a Lily, and preen and dry their plumage before flying away into the blue.

Americans with houses in the country are learning to live more and more out of doors; to take book or sewing or writing to some quiet, retired spot in the garden under a shady tree or arbor; to see their friends among the trees and flowers, and there have afternoon tea or take an evening meal *al fresco*.

In our garden a bench near the pool is a favorite resting place with all. There is a dreamy fascination in listening to the plashing water, whose liquid tones lend an

accompaniment to the thoughts that flit through the mind even as the shadows flit across the hills, or the changing clouds are reflected in the water. At night when the tall white Lilies gleam through the darkness and the air is heavy with their perfume, and moon and stars are mirrored in the clear pool, it is the time and the place for "touches of sweet harmony," and when a pure voice is heard singing "and the night for love was given, Dearest, come to me," from Schubert's serenade, a final enchantment descends upon the spot.

When staying at Oxford and wandering through those grand old gardens it has been easy to understand, how their calm beauty and charm have inspired the thoughts of the men who have produced so much that is best in English literature and poetry. The shaded alley by the Cherwell, the great purple beeches, the shadows fleeting across the grass, the antiquity of the place and all that the great university has stood for in its

Vase of *Lilium Longiflorum*
July tenth

centuries of existence, these surroundings and the life in the gardens must, if there is any poetry or spirit of imagination in him, stimulate the Oxford man to valuable literary work.

AUTUMN WORK IN THE FLOWER GARDEN

CHAPTER VII

AUTUMN WORK IN THE FLOWER GARDEN.

IT is difficult for beginners in the gentle art of gardening to realize how much time and patience are required to make success. It is equally difficult at first for them to understand that flowers to bloom in late Summer and early Autumn must be planted, if not the year before, certainly in very early Spring, and that the Spring garden must be prepared in the Fall.

There is no busier time in the garden than September and October, and no more delightful season for the gardener's work. After the first two weeks of September excessive heat does not return, and at any hour of the day it is a delight to be out-of-doors.

Everthing accomplished in these Autumn months is so much gained for the following

Spring. First of all, there are the seeds to be gathered—for why incur the expense of buying when those raised in your own garden may be just as fine and much fresher than those from the seed stores? Small cardboard or tin boxes, each with a pasted label with the name of the seed it contains, are the best in which to store the seeds.

Gather the seeds from the plants into a cigar box, and after carefully removing all the husks and dead particles, transfer them to the labeled boxes. Only enough of the annuals should be allowed to form seed pods to supply the quantity needed for sowing. Among the seeds easiest to gather, and surest to grow the following spring are Asters, Balsams, Centaureas (Cornflowers), Cosmos, Calendulas, Poppies of all kinds, Marigolds, Nasturtiums, Sunflowers, Zinnias, Hollyhocks, Sweet Williams, Foxgloves, and Larkspurs. Sweet Peas should not be allowed to form seed pods or they will cease to blossom.

Vase of White Japanese Iris
July fourth

Care must be taken to store the seeds through the Winter in a perfectly dry place. In case they are left in an unoccupied country house they should be protected from mice, as all flower seeds seem to be articles of delicacy much appreciated by these creatures. The flower seeds can be gathered all through the months of September and October until the plants are killed by frost. When gathering them do not omit the little black bulbils found on the stems of the Tiger Lilies. These should be planted as soon as dried, in some sunny place marked with sticks, which are not to be removed during the Winter, to insure that the ground where they have been planted will not be disturbed in the Spring.

Pansy seeds may be sown the first week in September in rows, in rich soil that has been made very fine. Water them daily, and by the time the ground freezes they will be nice little plants, able to endure the Winter. Do not transplant them this first

Autumn, but allow them to remain until the Spring in the rows where they have grown. They will do better next year if undisturbed. Pansies, however, that were sown in July may be transplanted in October to their final places. If they have been grown for flowering next year, all blossoms should be cut as soon as they appear. In this way the plants become larger and stronger. In localities where the Winters are severe a light covering of leaves or stable litter will help the plants to make an earlier start in the Spring.

If new beds and borders are to be made in your garden, the first days of September are not too early to begin. When these have been carefully staked out, the ground should be dug out two feet in depth and all stones removed. Put first a foot of old manure in the bottom of the bed, and then proceed to fill up with alternate layers, of about four inches each, of top soil (that taken from the first foot of soil taken out)

and manure. If the top soil is of a clayey nature, it should be put in a pile and mixed with one-fourth sand to lighten it before returning to the bed. This should be filled very full, as with the disintegration of the manure the bed will sink.

The owner of the garden may have noticed during the Summer that plants in certain beds or borders have not done well. The earth has seemed hard and dry, and the plants have not been luxuriant either in foliage or bloom. The soil is either poor or exhausted, or it has not been properly prepared. These beds should then be re-made by lifting the plants, setting them, after watering well, in a shady place and proceeding exactly as if making new beds. It is best to take up at one time only so much space as can be entirely finished and the plants reset in one day. Ground thus prepared will raise splendid plants for several years if given a top dressing of fine manure in the Spring after the plants have started.

About the twentieth of September, in the Middle States, one may begin to expect frost. The first frost often comes when the garden is glorious with bloom and color, and will make sad havoc in a single night. It frequently happens that after one such frost there will not be another for several weeks. Be on the watch, therefore, and protect your plants if possible.

The Cannas, Salvias, and Dahlias are in the height of their glory at this time. When frost is expected, drive a stake into the center of the Canna and Salvia beds, and several more stakes around the edges. Let them be several inches higher than the plants, then cover with carriage covers or pieces of burlap or old sheets. If there are September-flowering Chrysanthemums just coming into blossom, drive a few stakes among them and cover with newspapers. Newspapers spread over the tops of Dahlias will also protect them from the early frost. Half an hour spent after sunset in covering the

plants will bring great reward in prolonging their lives for possibly two weeks longer.

If seedling Foxgloves, Canterbury Bells, Columbines and Sweet Williams have been raised in your garden, they should be transplanted to the beds about the twentieth of September, so that they may become well rooted before the cold weather.

Sweet Williams make a fine effect when planted in large masses, and are very satisfactory grown as an edging. Columbines also make a good edging for a border filled with perennials and annuals. If the plants are strong and healthy, and are set out about four inches apart, they will grow quite together the following Spring.

Foxgloves, which grow from three to four feet high, should be planted rather far back in the borders. They are most effective planted in clumps of from six to a dozen plants, set about eight inches apart, and alternating with clumps of Phloxes.

Canterbury Bells grow about two feet

high, and with these plants also the best effect is to be obtained when they are grown in clumps of six or eight. Strong plants in rich soil will be quite a foot across when blooming. If planted a foot apart, they will grow together, and, with the Foxgloves, produce the most beautiful effect of the entire Summer. In case none of these plants have been raised, and no more fortunate kindly neighbor, with the free-masonry that exists among gardeners, can give them to you, they should be bought and planted at once, if they are to blossom in next Summer's garden.

Perennial Larkspurs, too, should now be finally transplanted. These are hardy and long-lived plants, growing from four to six feet in height, often higher. Plant six or eight together, about two feet apart. When the Larkspurs are finally cut down, a small quantity of fine coal ashes should be sifted over the tops of the plants, enough to cover the crown about half an inch.

Autumn planting should be done sufficiently early for the plants to become well rooted before the ground freezes, and a good covering of leaves or litter must then be given them late in the fall.

Japanese Anemones, tender Roses, Mont Brutus, Tritomas, and Altheas are among the few plants that should be set out in the Spring, that they may be thoroughly established before the Winter. But with the great majority of hardy flowers early Autumn is the best time to plant. The result in the following year will be better than if the plants are disturbed in the Springtime when growth is beginning.

If Lilies and spring-flowering bulbs are to be planted, they should be ordered early in September for October delivery. Lily bulbs are generally delivered about the 20th of October, with the exception of *Lilium candidum* (the well-known Madonna Lily), which makes an Autumn growth and should be planted not later than the 10th of Sep-

tember. *Lilium candidum* requires full sun. It should be left undisturbed for four or five years, when the clumps may be separated and replanted. *L. speciosum rubrum* should be grown in partial shade. Other Lilies will grow in the sun.

Auratum Lilies do best if planted a foot deep and about eight inches apart, and are most effective when growing in masses. Other lilies should be planted from six to eight inches deep and the same distance apart. When planting Lilies have a box of sand and set each bulb in a handful of this, for it is important that no manure should be allowed to come in contact with the Lily bulb, as it causes decay.

No garden, however tiny, should be without a few of the spring-flowering bulbs. They are not expensive. Indeed, in reading the catalogues one is surprised to find how many can be had for a small sum. No special place need be prepared for them; they can be planted anywhere among the

Pale violet Japanese Iris, veined with purple
July third

other plants. Single and double Tulips, Daffodils, Emperor and Von Sion Narcissus, *Narcissus poeticus,* and single and double Hyacinths, Lily-of-the-Valley, and the gay little Crocuses and delicate Snowdrops, once grown, will become the dearest friends. The middle of October is a good time to plant them.

When the annuals have been killed by frost, the plants must all be pulled up, taken away to some spot far from trees or buildings and burned. It is a bad practice to put these dead plants on the compost heap to be returned to the garden later as fertilizer. For if the plants have been attacked by any insects, their eggs may, and usually do, survive the winter cold, and another year the worm or insect coming from them will work serious harm to the young plants. The same is true of vegetable parasites, such as rusts, and other fungi whose spores survive the winter.

If your garden possesses Phlox or large

clumps of Iris, either German or Japanese, or Rudbeckias (Golden Glow), October is the time to divide their roots and set them out anew. Take, for instance, a large plant of Phlox, lift it from the ground with a spade and with the spade cut the root into pieces, leaving perhaps four or five stalks on each piece; cut off the tops and then plant each piece separately. In setting them out, loosen the earth of the bed well with the spade, make a hole larger than the roots will require, put a little manure into the hole and cover lightly with earth; then set the plant, pack the earth firmly around the roots and water thoroughly. This is a good rule to follow in all planting. Next Summer the heads of the blossoms will be larger than before and the plants will have renewed vigor.

It is absolutely necessary that Phloxes should be divided every three or four years to keep them in fine condition. In case one has a single large plant of a very fine qual-

ity, it is worth the trouble to take half of it, separate the roots so that but one stalk is left to each section, then plant these, as directed, somewhere in rows. In two years there will be a number of splendid plants.

The Rudbeckia (Golden Glow) is another perennial that can be divided almost indefinitely. If planted at the back of a border, alternating in clumps with Hollyhocks, it is very effective, but if not divided, certainly every other year, it will overrun the border.

Large plants of Paeonies may be separated, and if only a small portion of the root be taken it will not be noticed in the size of the parent plant the next year. But it is a very generous gardener who will divide her Paeony roots to give to a friend. It causes a severe wrench to your feelings to do this even for yourself, and is not to be recommended except in the case of some rare variety of which you wish to increase the number of plants. In late October the tops of the Paeony plants should be cut off,

and fine old manure carefully stirred into the earth around them with a trowel. The Paeony starts so early in the Spring, that if fertilizing be left till that time, there is danger of breaking the tender shoots. But as a rule, top dressing of plants and shrubs with manure for the purpose of fertilizing should be deferred until Spring.

Horticulturists have found that one-half the quantity of fertilizer, when used in the Spring, produces twice the result as when used in the Fall. The Winter rain and snow may carry the enrichment below the roots, while in the Spring every particle goes directly to help the new life just starting.

Japanese Iris, while not increasing very rapidly, is benefited by separation when the clumps have become large. The roots of this plant are very long and the holes to receive them when replanted must be made sufficiently deep so that they are not doubled up. German Iris may be separated in the same way and is benefited by it. The roots

Lilium Longiflorum

July tenth

of these two plants can be cut into pieces about the size of a man's fist and planted about a foot apart in clumps of six or eight together.

As soon as the tops of the Dahlias, Cannas, and Gladioli have been killed by the frost, their roots should be lifted, the tops cut off and the roots well dried. This is best done by placing them out-of-doors in a sunny place for three days, taking them in when the sun is low and putting them out about ten o'clock in the morning. When dried they may be stored until next Spring in baskets, boxes or barrels in a cool place in any cellar where they will not freeze. Dahlias increase tremendously. For instance, two dozen roots purchased one Spring increased in five Summers to six barrelfuls. Cannas also increase, in that the roots become so large that the following Spring they may be separated and there will be enough to plant nearly twice the space of the year before.

If the Tuberous-rooted Begonia is grown, it can be taken up and treated in the same way.

The last work of all in the garden, but not the least important, must be postponed until the end of November. This consists in giving the flower garden, in all localities where the Winters are severe, a covering of leaves and stable-litter. The plants will start earlier in the Spring and be better and stronger for this protection. They should not be covered, however, until the cold weather really sets in, and care must be taken to uncover the beds early, about the 25th of March.

Often during the frozen Winter the gardener's thoughts will dwell upon his sleeping plants, and when remembering the Lily bulbs placed in the earth in the Autumn he can but think how in the Spring they will rise into a new life, crowned with loveliest bloom.

THE FLOWER GARDEN IN THE SPRING

CHAPTER VIII

THE FLOWER GARDEN IN THE SPRING

WITH the first mild day that comes in March the thoughts of all garden lovers, who spend the Winter months in the round of city life, fly away to their gardens. They know that within the brown earth, soon to become soft and warm, the hearts of the plants are beginning to stir, and that watching eyes will see, with each day's sunshine, new tender shoots of green appear. Let us then consider first the order of work to be followed in an old garden, or in one that was laid out and planted the year before.

Wherever gardens were covered in late Autumn with a mulch this should be removed in the Spring, the very day that the frost entirely leaves the ground, otherwise the

plants under it may start unnaturally and their early growth be injured by late Spring frosts. When the beds are uncovered, the red shoots of the Paeonies, and the green ones of Tulips, Daffodils, Phlox, and Hollyhocks, will have already put up their heads. All gardeners know the thrill of delight with which this first appearance of life among the flowers is welcomed.

After the beds have been uncovered the whole place must be carefully raked, and all the beds, borders and paths edged, by cutting with a sharp spade or a grass edging knife. Wherever the grass seemed thin the season before, new seed should be sown and thoroughly rolled in while the ground is soft. In about two weeks this new grass should appear; and if some cotton seed meal, which is a most excellent fertilizer for grass, be sown thinly as soon as it is well up, and followed by some wood-ashes along in May, there should be a fine sod in June. If it is a dry Spring, the newly sown grass

Vase of *Lilium Krameri*
July fourth

must be thoroughly watered at least every other day. The various mixtures of lawn grass seed offered by the seedsmen are generally good, but I have found equal portions each to the bushel of Rhode Island bent, red-top, and Kentucky blue grass to give the best results.

Sweet Peas should be sown as soon as the ground can be worked.

During April and May every hour of every day is filled with work, for the success of the garden in Summer and Autumn depends upon what has been done in these early months.

The climbing Roses should now be carefully gone over, all the dead wood cut out and the loose branches fastened in place. Honeysuckle, Trumpet Creeper, and indeed all the hardy vines should be looked after in the same way. The hybrid-perpetual and other Roses that were not trimmed back in the Autumn should now be pruned, all dead wood and some of the larger branches cut

away, and the tops of the hybrid-perpetuals pruned back so that the bushes are from two to three feet in height. The Everblooming Roses can be pruned to a foot in height.

As soon as the Tulips, Hyacinths, and Daffodils are about three inches high, the earth should be gently stirred around them with a small trowel. But beyond this, beds planted with perennials should not be touched in the Spring until the plants have shown themselves above ground, as much injury might be done. When the perennials are well up, some fine, well-rotted manure should be carefully dug in around them with a trowel.

The hardy Chrysanthemums start very early in the Spring, and the best time to transplant them is when the shoots are about three inches high. Lift the old plant carefully, and with the spade divide it into sections having about four shoots to each. The beds to receive them should be in a

sunny place, along a stone wall or against a building or in front of a shrubbery, where there is some protection from the frosts of early Autumn.

Trees and shrubs should be planted as soon as the ground can be worked. Magnolias of all varieties, hybrid Rhododendrons, mountain Laurel, and *Azalea mollis* (which does not thrive in cold localities) should only be planted in the Spring. Rhododendrons and *Azalea mollis* do best in a partly shady location, and should be well mulched and not allowed to suffer from drought.

Hedges of all varieties can be set out in early April. Where the Winters are severe, privet is often winter-killed. This sometimes occurs after several years of growth and is a great loss. It is not so much a continual low temperature which kills, as the alternate freezing and thawing of our variable climate. Hemlock spruce, Siberian arbor vitae and honey-locust all make hardy and satisfactory hedges. After a hedge has

been planted, the earth over the roots should receive a top dressing of manure.

Unless your gardener thoroughly understands his business, and is also painstaking, you should give personal supervision to the setting out of trees and shrubs.

Shrubs of all kinds require to be set out as carefully as trees. They make the best effect if planted on the edge of the lawn, along fences, as screens about buildings, or in masses in odd corners. They should be well pruned when set out, excepting Rhododendrons, Laurel, Azaleas, and Magnolias, which should never be pruned. After the first year, all trimming must be done immediately after the shrub has ceased blossoming, as the flowers for one year grow on the new wood of the year before.

Driving in Central Park early last spring, I saw men cutting ruthlessly at the Syringas, Lilacs, Deutzias, and other flowering shrubs. I could have wept, and longed to cry "Stop!" The shrubs certainly needed

Pale Lilac Centauria
July tenth

pruning, but it was a short-sighted policy to lose a season's flowers by premature pruning, when by waiting three months the work could be done equally well and with better results.

Standard Box and Box-edging should always be set out in early Spring, as they need a season's growth to enable them to endure the first Winter. In case the Box-edging set out the year before has an uneven look, it can be clipped lightly, early in April before growth begins.

English Ivy is an excellent susbtitute for Box-edging as a border for paths or beds. In Paris it is universally grown for this purpose, as all will remember who have peeped through the tall iron fences or an open gateway into the trim court yards and gardens. The plants of Ivy are set about every three feet, and half of the shoots trained each way. The plants must be carefully pegged down, trimmed and kept free from dead leaves. By the end of the sec-

ond Summer strong plants that have been so planted and well cared for should form a border from eight inches to a foot in width. Where the Winters are too severe for the English Ivy to be grown against buildings and about the trunks of trees, it will survive when grown as a border flat upon the ground, where it can be covered in November with leaves or straw and evergreen branches.

Early in April some fine old manure, to which a small quantity of bone-meal and wood-ashes, about a pailful of each to a wheelbarrow of manure, have been added, should be dug into the ground about the Roses, shrubs, and vines; the reward in increase of growth and quantity of flowers will be great.

The spray machine must be looked over and put in order in earliest Spring, and the various insecticides provided in advance.

Hollyhocks must be sprayed with Bordeaux mixture as soon as they are well up,

which should be repeated about the 10th of May and again the 1st of June, to prevent the rust, that unsightly disease which covers the leaves first with red spots and then causes them to shrivel and fall, leaving a bare stalk. This year I have taken the precaution to spray the seedling Hollyhocks three times during the Summer, so that I hope to get ahead of the rust entirely.

The Roses, too, should be sprayed early in April with kerosene emulsion, and about the 1st of May with slugshot, and again, just before the buds form, with kerosene, as prevention against the creatures that attack them. Gardeners generally say, that this is unnecessary and wait until the pests appear, but experience has taught me that in the end it is less labor to keep ahead of the enemy.

The leaves of Monkshood have a tendency to turn black from some microbian disease, which will be averted if the plants are

sprayed in April, May and June with Bordeaux mixture.

A spray of tobacco water will kill the aphids that sometimes appear on Chrysanthemums, and also the red ones that occasionally infest the stems of Rudbeckias.

Spraying with insecticides becomes more and more necessary for successful growing of fruit and flowers. Many plant diseases are even more infectious and contagious than those of humanity, and it is often too late to begin spraying when the trouble is perceived. Nothing spreads more rapidly than mildew and rust when once they make their appearance. And while Bordeaux mixture, the best specific for these disfiguring afflictions, does not add to the beauty of the plants sprayed with it, still the spraying must be done, if the garden, once attacked with these troubles is to be preserved in a healthy condition.

Climbing Roses that have shown signs of mildew the previous Summer, should also be

sprayed in March, again when the leaves appear, and a third time after the roses have fallen. The moment that worms appear upon the currant and gooseberry bushes they must be sprayed with hellebore, and one application is generally sufficient.

The parasitic diseases appear in orchard and garden without warning and work great havoc in a short time. There is no doubt but that the spores are spread by the winds or carried by the birds, and one infected farm or garden spreads the trouble to another. As yet our place has been free from the dreaded San José scale, although neighboring farms have suffered from it. I trust that the future will see us still immune.

A friend on a neighboring farm, a young man who attends to everything in the most modern and scientific manner, is a great believer in the efficiency of spraying, has a fine equipment for the purpose, and sees that it is done at the proper times. A member of his family recently said to me:

"T—— has sprayed everything on the farm that can be sprayed, and I fear he will now begin upon the family."

While there are many advantages in Autumn planting, better results being obtained when plants need not be disturbed in the Spring, and because all garden work accomplished in the Fall is a great relief in the busy Spring days, still nearly everything can be planted in the Spring if necessary.

Most perennials can be planted in Spring. A few, however, such as Bleeding-Heart, Crown-Imperial, Paeonies, and Valerian, start so early that they should always be set out in the Fall. On the other hand, Japanese Anemones, Tritomas, and Montbretias are plants that must always be set out in the Spring, as they must be well established before the first Winter. Hybrid-perpetual and climbing roses can be set out in the Spring, if planted very early before growth begins, and the more tender varieties must always be set out in the Spring.

Funkias
August twenty-fourth

Where the climate is like that of New York, perennials can be planted safely about the 15th of April, and the earlier it is done, the less chance there is that they will receive a setback. Success in planting depends much upon attention to details. Care must always be taken, to properly prepare the ground, to give the roots plenty of room, to water well at first and not to allow the poor things to suffer for want of food and moisture.

Along in May if a mulch of grass-clippings, leaves from the Autumn before, or old stable manure, be spread over the Rose-beds, tuberous-rooted Begonias and Lilies, it will help them greatly through the summer.

Of the great number of hardy perennials the following are a few of those easiest grown and most satisfactory: *Aconitum napellus* (Monkshood), *Agrostemma, Anemone Japonica, Aquilegia* (Columbine), *Bocconia, Boltonia, Coreopsis grandiflora, Delphiniums, Dianthus, Dicentra spectabilis* (Bleeding-

Heart), *Dictamnus, Funkias, Helianthus multiflorus plenus* (double hardy Sunflower), *Hemerocallis* (Day Lily), *Hibiscus,* Hollyhocks, Iris, Lobelia (Cardinal flower), Oriental Poppy, Penstemon, Phlox, *Platycodon Mariesi, Scabiosi Caucasia,* Spireas, Tritomas, Veronica, Yuccas. The seed bed must be prepared as soon as the ground can be worked, and the seeds of perennials sown about April 10th. The earth for this bed should be made very light and fine, and from the time the seeds are sown until they are transplanted to their final home the little seedlings must never be allowed to dry out.

Of the foregoing, the following will be found easy to raise from seed: Columbines, Hollyhocks, Sweet William, *Platycodon Mariesi,* Delphiniums, Coreopsis, Hibiscus, Rockets, and Oriental Poppies. Also of the biennials, Foxglove and Campanula (Canterbury Bells). But it is better at first for the amateur to buy the plants of the other varieties.

Annuals may be sown from April 20th to May 10th, according to the season. Asters for late blooming may be sown up to the end of May.

In planting, tall-growing things should be set at the back of the bed or border, with the low-growing ones in front. Catalogues usually give the height, period of blooming and color of flowers, so that, with a little study, even the beginner in gardening cannot go astray. The flower gardener must remember that fine effects can only be produced by masses of color, and that a number of each variety of plants should always be set together. Never put one or two lone plants by themselves, with the rest of their family scattered about singly or in couples. Speaking of large clumps reminds me of a plot eighteen feet by forty, entirely filled with tall-growing perennial Larkspur, which is a beautiful sight when blossoming, and with fifty Japanese Anemone Whirlwind, grown in a mass, which surpasses in

beauty all other sights in the garden when they are blooming.

The making of an entirely new garden is a most delightful experience, but, like the marriage estate, is something not to be undertaken "lightly or unadvisedly." The amateur, who is a beginner in flower gardening, would scarcely be successful in planning, making, and planting a new garden, particularly a formal garden, without experienced advice. After selecting the location and determining the general conditions and character of the new garden, the place should first be carefully measured, and plotted accurately, almost to the inch. Then make a plan for the whole in detail, with the shape of every bed. After this has been done, and the gardener is convinced that as far as can be foreseen it is the most satisfactory arrangement for the ground, and will give her the garden of her dreams, let the actual work begin and let it not be delayed after the frost has left the ground.

Rocks (if they are in the wrong place) should be blasted out and stones and stumps removed. The sod should be turned up with a plow, and then carted off and piled in some out-of-the-way place to decompose. It will then be ready to be returned to the garden and made useful as a valuable fertilizer, or in planting trees, shrubs and Rhododendrons, for which it is especially valuable if chopped up and put in the bottom of the hole made to receive the roots. The ground should then be carefully levelled, thickly covered with manure, plowed deeply and harrowed thoroughly three or four times; if the garden is not too large, it should be spaded over as well. It is then in condition for laying out the beds and walks. For this work there should be a large quantity of garden cord, a long measuring tape, many pointed stakes, and a wooden mallet. The center of the plot is first marked with a stake, and from this point the other measurements are taken off

according to the plan, the outlines of each bed being marked by stakes driven in about every three feet, with cord stretched along between them. Cord must also be stretched to mark the paths; stakes should then be driven to mark the places for trees, which should be the first thing planted. If it is to be a formal garden, pyramidal-shaped evergreens are the best for the purpose.

In preparing the beds, better flowers will be produced for a longer time if, for a bed ten feet long by four feet wide, some bone-meal, leaf-mould (if any can be found) and wood-ashes—a pailful of each—be added to a wheelbarrow of manure, with a sprinkling of lime, and then thoroughly spaded in. If the soil be heavy, add also enough sand to lighten it. This seems a prescription of many ingredients, but it is worth the trouble.

If the garden is in a locality where Box will grow, although the expense is considerable, it will be a great addition to edge the bed and paths with Box. But great care

must be taken to set the little Box plants perfectly straight. The beds may then be planted with perennials, annuals, and Lilies, according to your taste; but remember always to preserve harmony of color and to secure effect by planting a number of each variety together.

If the paths are to be of grass, the grounds, after being levelled, need only be raked smoothly, the grass seed sown and carefully raked in with an iron rake and the paths rolled.

Grass paths have but two disadvantages. They are impracticable near the house or where they are put to severe usage, as turf is unable to resist the wear of constant walking. They are, also, often damp with dew in the early morning and always wet for a time after a rain, but they will dry quickly if the grass be kept closely cut, and the owner can supply herself with overshoes when she would sally forth upon the wet turf. How many of us must plead guilty

to walking upon the grass borders of graveled paths because the gravel was tiresome or reflected the heat! For those, however, who spend the four Winter months in the country, gravelled walks are a necessity if they are to be used at all.

If they are to be gravelled, they must be dug out a foot or more in depth, filled in first with broken stone, then a layer of coarse gravel and finally the fine gravel, and all well rolled. All this having been done, the gardener has only to keep trespassers from the newly-sown grass, to water his garden in late afternoon and to possess his soul in peace until, when a month has slowly passed, he will find the beds covered with the sturdy green shoots of the new plants, the Box-edging putting forth tender leaves, the grass a velvet carpet, and he can then bid his friends come to see the new garden and picture to them its future beauties, which imagination has already painted upon his mind.

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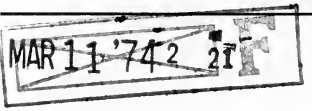

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